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DIGITAL INBOUND CONTENT AS A SOURCE OF VALUE: THE APPLICATION IN A START-UP COMPANY

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ABSTRACT

Nikita Gavrilenko: Digital Inbound Content as a Source of Value: The Application in a Start-up Company

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Digitalization has significantly impacted the interaction between companies and their customers. As a result, social media and Internet are becoming the main fields for communication in a business world. With these new communicational channels, modern marketing methodologies such as digital, inbound, and content marketing are on the rise, while traditional marketing techniques such as cold calls, print advertising, and TV campaigns are less effective. Although the communication of customer value is the main objective in marketing and customer value is one of the most studied concepts in management, the research literature on its application in digital marketing as well as the research on digital marketing methodologies themselves, is scarce. Moreover, the communication of customer value with traditional marketing is a challenging process for a start-up company, due to start-ups limited amount of resources and small industrial network.

The objective of this thesis is to introduce the concept of digital inbound content as a source of value and to explain how it can be used to communicate the value of a start-up company's offering. The usage of digital inbound content is beneficial for a start-up due to cheaper distribution channels of digital marketing in comparison with traditional marketing. Furthermore, inbound marketing methodology is more customer-oriented and focused on building pleasant relationships with different stakeholders and therefore will benefit a start-up company in developing its social capital.

The study shows that digital inbound content is an effective tool for showcasing the value of a start-up company's offering through a start-up's owned media. In addition, digital inbound content positively contributed to the process of constructing the value proposition and the development of start-up's owned media, as well as improving the content creation overall and building start-up's brand. Study has also shown that digital inbound content can be presented as the value itself, for example, in a case if a company creates educational material that is distributed for free. The developed theoretical framework of digital inbound content as a source of value is applicable as a guideline for the content creation and distribution of it in a start-up company's owned media. Furthermore, study shows that more extensive research is needed in a field of digital marketing as literature does not provide comprehensive theoretical framework on it.

Keywords: digital marketing, inbound marketing, content marketing, customer value, start-ups

The originality of this thesis has been checked using the Turnitin Originality Check service.

PREFACE

At the time of my master studies, I have realized that I can combine my background knowledge in engineering and strong passion towards visual arts in business and management, specifically in the field of marketing. In fact, knowledge in visual arts and graphics design have helped me to create all the figures for this thesis (everything is drawn by myself including all the tiny icons). Moreover, design thinking has significantly helped me in solving business cases and, as managers like to say, helped me to “see the big picture”. Interestingly, to my experience, neither most of the engineers nor artists that I know, were able to figure out the benefits of how these two areas can work together. Hopefully managers will do.

When I got the proposition to work on projects in the case company, I was really scared because electronics hardware testing was an area that is even challenging to pronounce. In addition, the case company was a start-up in its early stages, without developed business operations or organizational structure. Luckily, this start-up has an amazing people working there, who were always ready and happy to support, with whom we have already got over many difficulties that fall upon the winding road of a start-up company. The case company now is ready to launch its main product, and the team is awaiting the very positive future results of this launch. Hopefully, all the marketing projects in which the author participated will bring a lot of benefits to the case company.

I would like to thank Dr. Jouni Lyly-Yrjänäinen for the support and guidance throughout the process of writing this thesis and for the support during the whole study period. Moreover, Dr. Jouni was one of those people who helped me to discover my true potential by utilizing my knowledge in visual arts, which I am very thankful for. Special thanks to Professor Teemu Laine for valuable comments and insights regarding this study. My most sincere gratitude I would like to express to the management of the case company, and especially to the CEO, who was always patiently answering all the most “interesting” questions I had, and who was always been an amazing supervisor and solid comrade. I cannot forget to mention my family and my beloved one, because without these people the most difficult (master study) years of my life would be truly unbearable.

Tampere, 18 November 2019

Nikita Gavrilenko

CONTENTS

1. INTRODUCTION	1
1.1Background.....	1
1.2Objectives	2
1.3Research Process	3
1.4Data Gathering Methods	7
1.5Structure of the thesis.....	9
2. INBOUND AND CONTENT MARKETING	11
2.1Inbound Marketing Definition.....	11
2.2Inbound Marketing as a Digital Marketing Strategy.....	14
2.3Content Marketing Definition	16
3. DIGITAL CONTENT IN DIFFERENT MEDIA.....	22
3.1Types of Media	22
3.2Digital Content in Media Types.....	25
3.3Digital Inbound Content as a Marketing Tool.	31
4. CUSTOMER VALUE OF DIGITAL INBOUND CONTENT	34
4.1Customer Value Definition	34
4.2Customer Value Creation Framework	37
4.3Digital Inbound Content as a Source of Value	39
4.4The Use of Digital Inbound Content for a Start-up	44
5. THE CASE COMPANY	51
5.1The Industry of Electronics Hardware Testing	51
5.2Software for Electronics Hardware Testing.	55
5.3The Case Company and Consultancy Business	58
6. THE DEVELOPMENT OF THE CASE COMPANY AND ITS MAIN PRODUCT	62
6.1The Development of the Case Company in Relation to its Main Product	62
6.2Value and Benefits of the Case Company's Testing Software.....	67
6.3Content Development and Marketing-Related Activities.	74
7. DISCUSSION AND LESSONS LEARNED	81
7.1Overview of the Problem and Framework	81
7.2Reflection of the case in the Framework	83
7.3Analysis of the Results	86
7.4Limitations and insights for further development.....	90
8. CONCLUSION.....	92
BIBLIOGRAPHY	94

APPENDIX 1: Customer Value Creation Framework (Smith & Colgate, 2007)

APPENDIX 2: New Venture Team Input-Mediators-Outcome Framework (Klotz et al., 2014)

LIST OF FIGURES

Figure 1.	<i>Timeline of the Internship Period Projects and the Case Company Events.</i>	4
Figure 2.	<i>Timeline of the Master's Thesis Period Projects and the Case Company's Key Events.</i>	5
Figure 3.	<i>Timeline of All Projects and Events Related to Digital Marketing.</i>	6
Figure 4.	<i>Data Gathering Methods for Case Study Research (Gummesson, 1993).</i>	8
Figure 5.	<i>Data Gathering Methods Used During Company's Projects.</i>	9
Figure 6.	<i>Goods-dominant Logic and Service-dominant Logic (Lusch & Vargo 2009).</i>	12
Figure 7.	<i>Conceptual Representation of Inbound and Outbound Marketing.</i>	13
Figure 8.	<i>Overlapping Tools of Inbound and Outbound Marketing (Rancati et al., 2015).</i>	15
Figure 9.	<i>Content Marketing Funnel and Business Objectives (Roze & Pulizzi, 2011).</i>	19
Figure 10.	<i>Three Types of Media (Leib et al., 2012).</i>	22
Figure 11.	<i>Social Media Page as an Example of Converged Media.</i>	24
Figure 12.	<i>Types of Media – More Detailed View.</i>	25
Figure 13.	<i>Relationships Between Media Types, Media Tools and Digital Content.</i>	26
Figure 14.	<i>Examples of Infographics.</i>	28
Figure 15.	<i>Examples of Blogs.</i>	29
Figure 16.	<i>Digital Inbound Content.</i>	31
Figure 17.	<i>Digital Inbound Content as a Content Marketing Tool.</i>	32
Figure 18.	<i>Customer Perception Model i.e Kano Model (Khalifa, 2004).</i>	35
Figure 19.	<i>Customer Value in Exchange (Khalifa, 2004).</i>	36
Figure 20.	<i>Perceived Customer Value (Lyly-Yrjänäinen et al., 2019).</i>	36
Figure 21.	<i>Customer Value Hierarchy Model (Woodruff, 1997).</i>	37
Figure 22.	<i>Digital Inbound Content as a Source of Value.</i>	40
Figure 23.	<i>Digital Inbound Content as a Source of Value Dual Perspective.</i>	42
Figure 24.	<i>Digital Inbound Content as a Source of Value in a Content Marketing Strategy.</i>	43
Figure 25.	<i>Start-up Related Terms.</i>	44
Figure 26.	<i>Start-up characteristics.</i>	45
Figure 27.	<i>New Venture Team Input-Mediators-Outcome Framework (Klotz et al., 2014).</i>	46
Figure 28.	<i>Expanded Start-up Characteristics.</i>	48
Figure 29.	<i>Digital Inbound Content as a Source of Value for a Start-up Company.</i>	49
Figure 30.	<i>Electronics Hardware Testing in Product Development and Manufacturing.</i>	51
Figure 31.	<i>Major Stakeholders of Electronics Hardware Testing.</i>	52
Figure 32.	<i>Main Components of Electronics Hardware Testing.</i>	53
Figure 33.	<i>Software Environment Integrates the Components of Electronics Hardware Testing.</i>	54
Figure 34.	<i>DUT Directly Connected to the Computer.</i>	55
Figure 35.	<i>DUT Connected to the Test Adapter.</i>	56
Figure 36.	<i>Test Box with Test Adapter in Production Line.</i>	56
Figure 37.	<i>Developing Own Framework vs Using Special Testing Software.</i>	57
Figure 38.	<i>Industries Where the Case Company Customer's Operate.</i>	58
Figure 39.	<i>The Case Company's Worldwide Network of Consultancy Customers.</i>	59

Figure 40.	<i>The Case Company's Consultancy Services Coverage.</i>	60
Figure 41.	<i>The Pathway of the Case Company's Development.</i>	62
Figure 42.	<i>Key Events from Telecommunication Company Period to 1st Prototype Launch.</i>	63
Figure 43.	<i>From 1st Prototype Launch to the Pilot Version.</i>	65
Figure 44.	<i>Social Media Channels' Goals.</i>	66
Figure 45.	<i>The Goals for Building the New Website.</i>	66
Figure 46.	<i>Testing Software in Manufacturing.</i>	68
Figure 47.	<i>The Main Problems in Electronics Product Testing Addressed by the Case Company.</i>	68
Figure 48.	<i>The Features of Electronic Products Test Platform.</i>	69
Figure 49.	<i>Cost Structure of the Testing Software over the Lifetime of Test Environment (National Instruments, 2019).</i>	70
Figure 50.	<i>Differences in Software Costs and Benefits Provided by Case Company's Test Platform.</i>	71
Figure 51.	<i>Total Cost of Ownership of an Automated Test Environment (National Instruments, 2019).</i>	72
Figure 52.	<i>Benefits of the Case Company's Electronics Products Test Platform.</i>	73
Figure 53.	<i>Reasons for Marketing-Related Activities Before Starting Sales.</i>	74
Figure 54.	<i>The Case Company's Content and Marketing Projects.</i>	75
Figure 55.	<i>Information Exchange Between the Case Company's Pitch Deck and Other Content and Marketing Projects.</i>	76
Figure 56.	<i>The Case Company's Website as a Hub for Social Media.</i>	77
Figure 57.	<i>Main Content of the Case Company's New Website</i>	78
Figure 58.	<i>Benefits of Marketing Technics the Case Company Used.</i>	80
Figure 59.	<i>Main Theoretical Framework of This Thesis.</i>	82
Figure 60.	<i>Development of Owned Media and Branded Content.</i>	84
Figure 61.	<i>Development of the Case Company's Website and Sharing of the Content.</i>	84
Figure 62.	<i>The Case Company's Digital Inbound Content Works as a Source of Value.</i>	85
Figure 63.	<i>Reflection of the Case in the Main Theoretical Framework.</i>	86
Figure 64.	<i>Main Results Achieved with the Framework and Theoretical Concepts.</i>	87
Figure 65.	<i>Creating Owned Media with Digital, Inbound, and Content Marketing.</i>	88
Figure 66.	<i>Content Standardization and Distributions</i>	88
Figure 67.	<i>Better Communication with Inbound Marketing.</i>	89
Figure 68.	<i>Empirical Framework as a Guideline.</i>	89
Figure 69.	<i>Limitations of the Main Theoretical Framework and the Case.</i>	90
Figure 70.	<i>Digital Inbound Content as a Source of Value: Application in a Start-up Before it Starts Sales Operations.</i>	93
Figure 71.	<i>New Venture Team Input-Mediators-Outcome Framework Full Version (Klotz et al., 2014).</i>	102

LIST OF SYMBOLS AND ABBREVIATIONS

IoT	Internet of Things
CAD	Computer Aided Design
MES	Manufacturing Execution System
SW	Software
HW	Hardware
HR	Human Resources
SEO	Search Engine Optimization
B2C	Business to Consumer
B2B	Business to Business

1. INTRODUCTION

1.1 Background

With the rise of digitalization, the main communication between companies and customers has shifted to Internet and other digital forms of interaction. It is evident, not only from pale observation, but also data proves that this trend will only grow in the foreseeing future. The overall number of internet users has been steadily growing for the last 10 years and reached around 3.5 billion in 2018, which represents almost 50% of the population (Meeker & Wu, 2018). It is also expected that around 50 billion devices will be connected to the internet by 2020 (McKinsey Global Institute, 2015). In addition, 60% of today's transactions are electronic (Meeker & Wu, 2018).

As new forms of interaction with customers are emerging, companies are trying to develop new strategies for sales and marketing. Moreover, there are many customers for whom Internet is often the initial source of information before buying (McMaster, 2010). Digitalization, in this regard, has been successfully adopted by business to consumer segment (B2C). Many B2C companies have their own websites, are actively using social networks and are replacing traditional advertisement techniques with methods that create pleasant experience and more personalized interaction with customers (Halligan & Shah, 2014). The situation is different for B2B sector as many companies still prefer to utilize rather traditional marketing approaches at the same time being technologically more advanced. Data suggests that, in recent years, B2C segment has outpaced B2B in digitalizing marketing and sales, for the reason that B2B companies often underestimate the benefits of digitalization, only pursuing the related trends after the consumer segment (Kuchler and Cederlöf, 2016; McKinsey & Company, 2017). On the other hand, Adamson et al. (2012) claim that around 60% of purchases in B2B are completed before any conversation with a supplier take place.

Patruti-Baltes (2016) states that every company, regardless of the sector of operation or industry, should use digital marketing as it brings significant benefits at lower costs. Furthermore, providing pleasant customer experience has become important and traditional marketing techniques such as cold calls or paid TV-commercials have become less successful (Halligan & Shan, 2014). In addition, according to Kannan (2017), digital marketing is a technology-driven process of joint collaboration between companies and

their customers. Therefore, there is a need for more customer-oriented digital marketing methods.

Digital marketing methodology gaining more popularity and achieving success in the market is inbound marketing (An, 2018). Hawlk (2018) suggests that Internet has made inbound marketing popular and also profitable, as distribution channels for the content are often free. Furthermore, the increased distribution of content within consumer industry created an increased trend of using content marketing (Gamble, 2016), which is another emerging digital marketing technique.

One of the most important tasks and, at the same time, the main challenge for marketing is to showcase the value company provides for its customers (Kumar & Reinartz, 2016). In addition, achievement of organizational and societal goals, which can be seen as general marketing objectives, is only possible by providing superior customer value (Smith & Colgate, 2007). As the ways of interaction between companies and customers are changing, there is a need for new approaches to communicate customer value, too.

When many B2B companies are still using traditional marketing technincs, it is important to remember that start-up companies have always played an important role in bringing innovations to the market (Colombo & Piva, 2008; Davila et al., 2003, cited in Spender, 2017). For this reason, start-ups can be seen as potential adopters of emerging digital marketing trends. The challenge for a start-up company, however, is the lack of both tangible and intangible resources (Wymer & Regan, 2005). Social capital is also an important attribute that start-up company might be missing (Klotz et al., 2014). In this case, digital, inbound and content marketing might be the right tools to consider.

1.2 Objectives

This thesis discusses the concepts of digital, inbound and content marketing. Although the research on these subjects is scarce (Holliman & Rowley, 2014) and there are no theoretical frameworks related to them (Zahra & Noruzi, 2018, Wang et al., 2017), companies are using digital marketing technincs more and more. Furthermore, this thesis proposes a concept of digital inbound content, which is considered to be more customer-oriented with an intention to build pleasant relationships with customers, in comparison with traditional marketing technincs which are more sales-oriented.

One of the main goals in marketing is the communication of customer value provided by the company's offering (Kumar & Reinartz, 2016). Based on Smith & Colgate (2007), general value sources are information, the product itself in terms of its capabilities, interaction, environment, and the ownership of the product. This thesis proposes that digital

inbound content can be presented as another source of value which is justified by the fact that the interaction between a company and a customer is more digitalized. In addition, this thesis suggests that digital inbound content can be utilized by a start-up, which usually has limited amount of resources, small industrial network, and the tendency towards innovation. Thus, the main goal of this thesis is...

... to introduce the concept of digital inbound content as a source of value and discuss the application of it and the application of digital marketing methodologies such as inbound and content marketing for a start-up company.

In order to address this objective, this thesis analyses and reviews the literature on digital marketing, inbound marketing, content marketing, customer value and start-ups. Based on the literature, the theoretical framework is designed in order to be used as a marketing tool and guideline for a start-up company. This framework is tested in content development and marketing projects of the case company which is a start-up operating in the field of electronics hardware testing.

1.3 Research Process

Research process unofficially started in May 2018, when the author got a proposition from university supervisor to participate in the project offered by software start-up company that operates in the field of electronics hardware testing. The project was related to value proposition and digital marketing strategy of SaaS (software as a service) start-up company. Later, in July 2018 the author was offered an internship in the case company and, at the time of writing this thesis, the author continues to work at the case company as a business development and marketing intern.

Working on the project and, later on, other matters related to the case company's marketing and business development, the author got an opportunity to learn about software business, electronics hardware testing in manufacturing and product development, as well as start-up business environment. Moreover, all the projects were held under the supervision of the case company CEO and other members of the case company also cooperated with the author. Figure 1 shows the main milestones of the project and the key events held in the company during the time period of the internship.

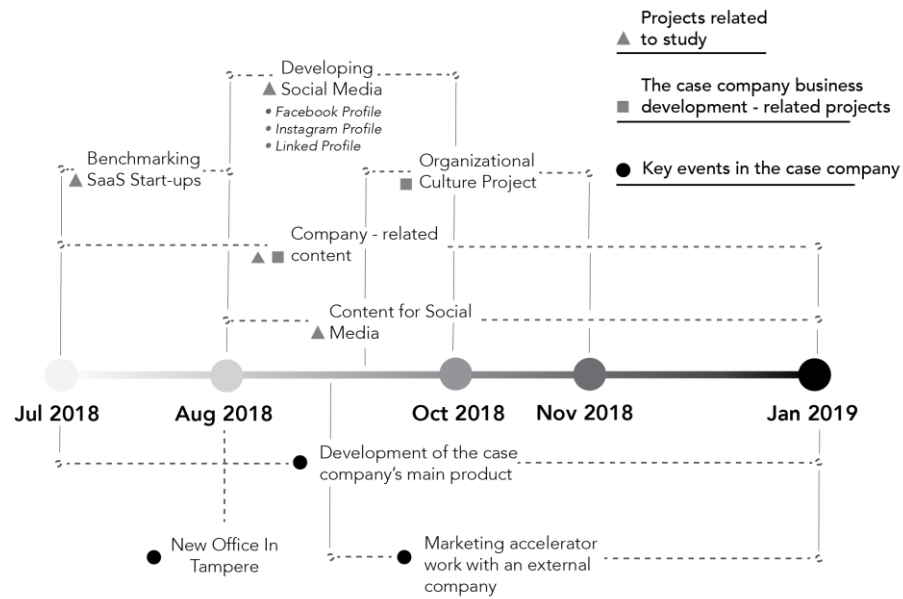


Figure 1. *Timeline of the Internship Period Projects and the Case Company Events.*

The author had an internship in the case company since July 2018 and until January 2019. In general, during that time, the author produced various content marketing materials for the case company's social media, website, and investment-related documents while extensively cooperating with the case company CEO on business development matters. Figure 1 outlines two main timelines: top part shows projects directly related to the authors' internship and studying, and the bottom part lists some of the key events in the case company during that period.

Explaining Figure 1 further, the top part consists of projects related to study and the case company's business development projects. First, referring to study-related projects, the internship started with a benchmarking of SaaS start-up websites in order to collect the information on how such companies convey value proposition with the content on websites and social media. Later, author had to create the case company's own social media presence making Facebook, Instagram, and LinkedIn profiles. Meanwhile, organisational culture project kicked off, with the main goal to build the framework for future employee profiles and impact the case company's branding. At the same time the author was continuing to work on the content for social media and, being able to produce relatively good graphics, the author was also developing graphical content for the whole internship period.

Second, the case company had several key events during that period. Opening a new office in Tampere was done in the end of August 2018 with the further plan to have more employees. Later, between September and October 2018, the case company started an accelerator marketing program with an external company. During all that time, the case

company was continuing to work on the development of the main software product. Figure 2 shows the timeline of the events happened during the official Master's thesis period.

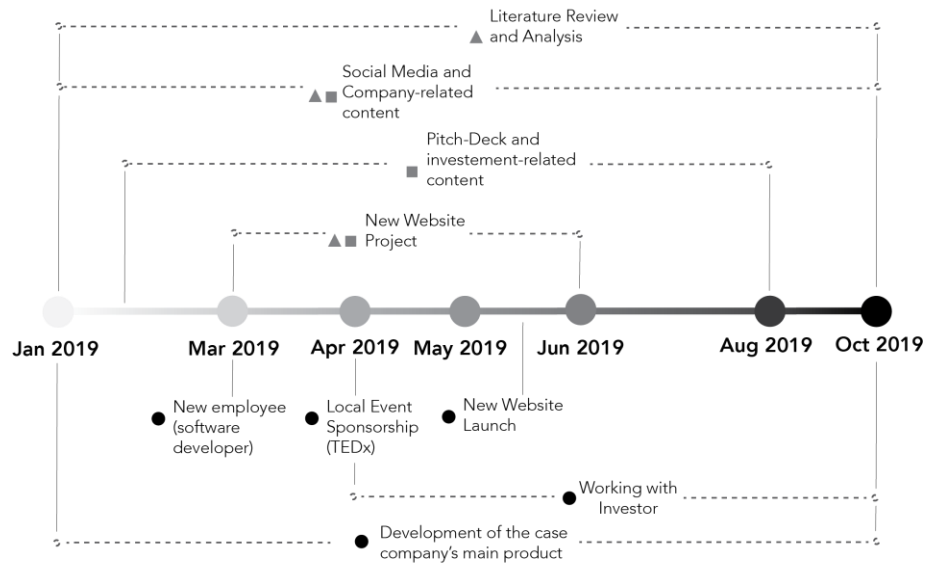


Figure 2. *Timeline of the Master's Thesis Period Projects and the Case Company's Key Events.*

As it is shown in the figure above, in January 2019 the author was offered a Master's Thesis position by the case company, while continuing to work as a business development and marketing intern. Main targets of the case company during that period revolved around building a team, developing further its software product in order to kick-off the first demo, and establishing relationships with investors. In addition, the case company started to develop its digital presence more extensively.

One of the main goals for building digital presence was the development of a new company website. The author took an important role in this project, developing graphical content that would correlate with the case company's business and marketing objectives. The new website was launched in the end of May 2019. Another important project where the author extensively participated was the development of the case company's pitch deck. This project brought up a lot of understanding regarding the case company's business and industry of electronics hardware testing. Meanwhile, the author was working on the content for social media, new website, and other company-related matters. Literature review and analysis was done throughout the whole period. All the aforementioned events, including the internship period, can be presented in one timeline. This timeline is presented in Figure 3 and it is intended to summarize projects and events in relation to this thesis.

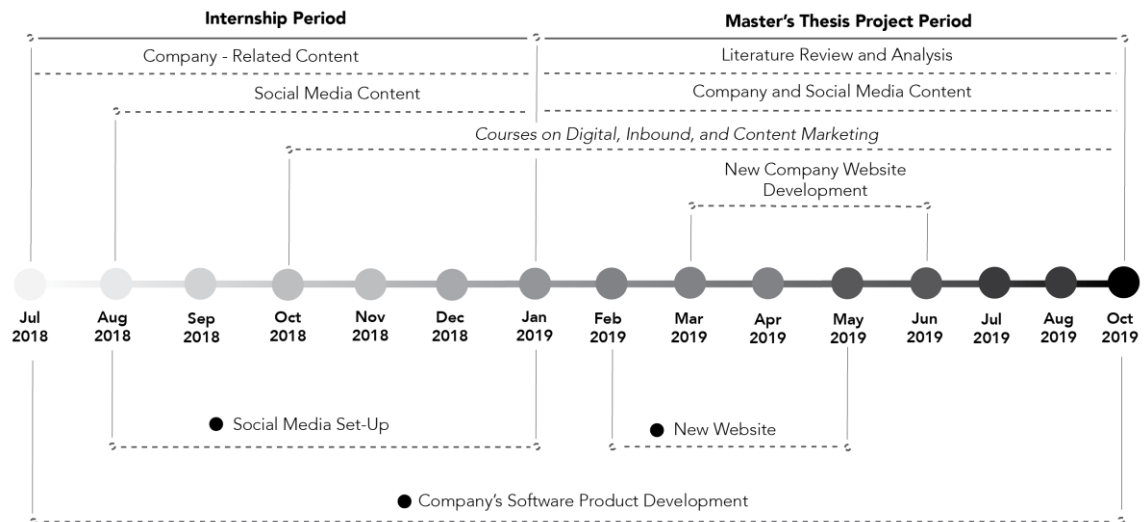


Figure 3. *Timeline of All Projects and Events Related to Digital Marketing.*

The timeline of Figure 3 consists of two main parts which are Internship Period and Master's Thesis Project Period. This division is based on the author's employment relationships with the company and allows to present information in a more constructive way. As mentioned, the main event during the internship period was the set-up of the case company's social media profiles, which happened between August 2018 and January 2019. The whole internship period took place between July 2018 and January 2019.

Main events during Master's Thesis Project Period were further development of social media profiles, development of the new website, and creating a content related to the case company's main software product (this content was extensively used in the case company's pitch decks and other business presentations). In summer 2019 the case company was preparing for the main software product demo. The literature analysis started in January 2019 and lasted until September 2019. In addition, it is important to outline that the author took courses on digital, inbound, and content marketing, as part of the case company's projects and for the reasons of personal development.

To conclude, during all the time working with the case company, the author was involved in the creation of the content for the case company's media and different business and marketing activities. All these events and projects brought up a lot of insights in the creation of theoretical framework of this thesis and personal development of the author as a marketing specialist. The further plan of the company is to commercialize its software product, which is expected by the end of 2019.

1.4 Data Gathering Methods

Research stands as a fundamental milestone on a way of gaining knowledge about certain topic in the academia and business world as well. Amaratunga et al. (2002) claim that there is no common ground on how to define research in both academia and business, but it happens that many definitions have the following in common: research is an investigation process, research has a system and methodology, and research increases knowledge. Following somewhat similar logic, Saunders (2011) defines research in business and management as an initiation of systematic actions directed to find out information about business and management.

Yin (1981) states that there are four main research strategies which are case study, experiment, history, and simulation. This thesis is a case study and for this reason the concept of the case study will be explained more detailed. Literature gives information that case study utilizes both qualitative and quantitative approaches (Voss et al., 2010) and the fact that case study research is mainly qualitative is rather a misconception (Yin, 1981; Flyvbjerg, 2006). Nevertheless, qualitative research methods in case study research are more common (Elman et al., 2016). Polit & Beck (2011) claim that the goals of most qualitative researches revolve around building a systematic and prosperous understanding regarding some specific area of human experience, while being deeply involved in a study of particular cases. According to Lee et al. (1999), management qualitative research strives to elaborate and test management theories.

Referring back to the case study research concept, Eisenhardt (1989) provides the following definition: “a research strategy which focuses on understanding the dynamics present within single settings”. Based on this definition, it is possible to derive that case study research is usually concerned with an in-depth investigation of a single case of a particular organization. Some literature sources (Elman et al., 2016, Flyvberg, 2006, Bryman & Bell, 2018) also provide similar viewpoint. Gummesson (1993) describes what types of data gathering methods can be used in case study research and categorizes them on five different groups. Figure 4 illustrates these methods.

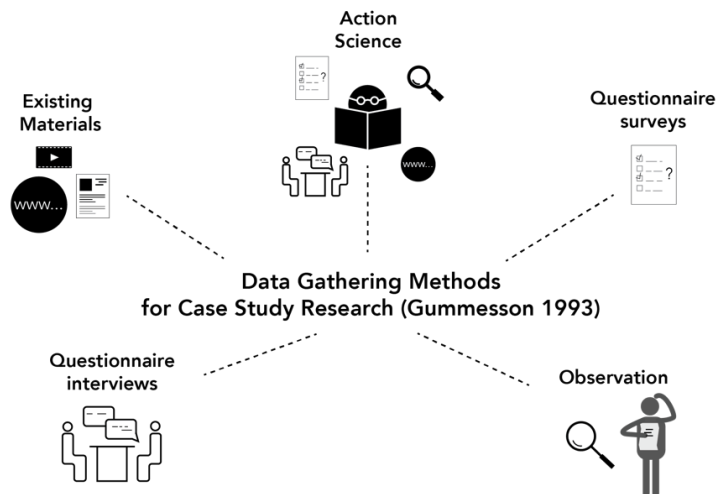


Figure 4. *Data Gathering Methods for Case Study Research (Gummesson, 1993).*

As Figure 4 showcases, Gummesson (1993) categorizes data gathering methods for the case study research on existing material, questionnaire surveys, questionnaire interviews, observation, and action science. First, existing material is understood as everything that is gathered by various media sources other than humans and usually referred to as a secondary source of data. Examples of such media sources can be articles, mass media reports, films, and brochures. Second, questionnaire survey is used in formal interviews and these questionnaires are standardized. These interviews are also considered as a quantitative method in case studies.

Third, questionnaire interviews, which are closer to a free-form conversation rather than a formal interview, are considered the most common method for gathering data in case study research (Gummesson, 1993). Fourth, observation is concerned with inspecting and monitoring the subject of study and it is divided on participant observation and direct observation. The first one requires an involvement of a researcher in the process, and in the second one, a researcher is not taking part in the process but rather watching the process itself. Finally, in action science, the researcher is actively participating in the study and influencing the process. In addition, action science can include the use of all the other methods, too.

The goal of this thesis is the development of theoretical framework of digital inbound content as a source of value for a start-up company. In order to build this framework, various data gathering methods were implemented. Action science can be considered as a main data gathering method, due to the fact that the author was working in the case company being deeply involved in different activities related to the development of marketing in the case company. Apart from action science, such methods as existing material, questionnaire interviews and observation were used. A lot of information related to

the case company were gathered from the case company's documentation, brochures, website, and social media, as the author took an extensive part in developing these resources. Questionnaire interviews were also conducted with the case company's personnel. Figure 5 shows the data gathering methods used.

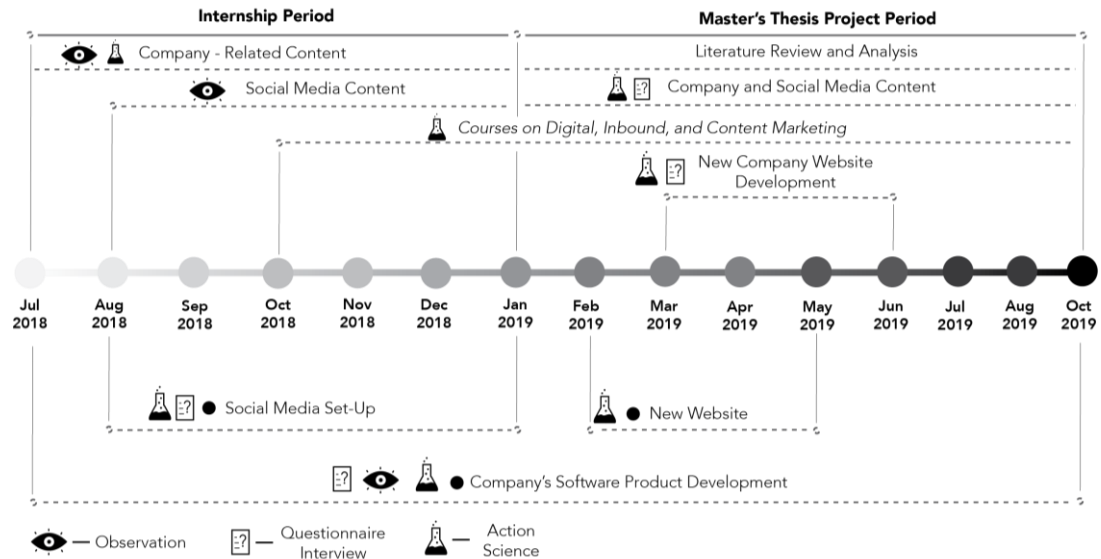


Figure 5. Data Gathering Methods Used During Company's Projects.

The figure above depicts what kind of data gathering methods were used during the case company projects. Action science can be seen as the dominant method for this thesis, due to the fact that the author took an extensive part in all the case company's development activities. Nevertheless, Figure 5 also emphasizes questionnaire interviews and observation as these methods were important as well for gathering data in certain situations.

1.5 Structure of the thesis

This thesis is logically divided on eight chapters. The objectives and content of the chapter is presented in the following way:

1. Chapter 1 is an introductory chapter that discusses the background and main objectives of this study. Furthermore, this chapter explains the research process and discusses data gathering methods used in this thesis.
2. Chapter 2 is dedicated to inbound and content marketing. Inbound marketing is discussed from different points of view, and then content marketing is introduced as a part of inbound marketing. In addition, various definitions of content marketing analyzed and categorized on different perspectives.

3. Chapter 3 describes different media where a company can use its digital content. More specifically, this chapter discusses the concepts of owned, shared, and earned media, gives definition to digital content in its essence, and proposes the concept of digital inbound content.
4. Chapter 4 discusses the concept of value proposition and describes the characteristic of a start-up company. Then, this chapter summarizes the aforementioned concepts in a framework of digital inbound content as a source of value for a start-up.
5. Chapter 5 introduces the case company, briefly describes its history and the industry of electronics hardware testing. In addition, this chapter discusses the case company's consultancy business.
6. Chapter 6 describes the development of the case company in more detail. Then, it discusses the main product of the case company and the case company's content development and marketing activities.
7. Chapter 7 discusses the research problem and reviews the main theoretical framework of this thesis. This chapter also analyses the reflection of the framework in a case, discusses the results and possible limitations and suggestions for further development.
8. Chapter 8 is a conclusion chapter of this thesis.

2. INBOUND AND CONTENT MARKETING

2.1 Inbound Marketing Definition

This section discusses the concept of inbound marketing. It provides the definition to inbound marketing and also outlines its differences from traditional or outbound marketing based on two perspectives. The first perspective comes from concepts of goods-dominant logic and service-dominant logic, while the second perspective is concerned with how customers get to know about a company's offerings.

Inbound marketing is a rather modern approach and for this reason there is not a lot of research literature about it. Moreover, for B2B sector, the theory about digital marketing and sales overall is scarce (Holliman & Rowley, 2014). Most of the content is distributed through blogosphere and various Internet resources. According to Casas (2016), inbound marketing and its digital implications, such as social media, are placed between two apparent disciplines of marketing and information systems. For these reasons and for the reason of the newness of the discipline itself, the research material is deficient as well. Nevertheless, it is possible to conceptualise the definition of inbound and outbound marketing following various perspectives.

First, one way to observe the definitions of inbound and outbound marketing is to take a look at the concepts of goods-dominant logic and service-dominant logic. According to Lusch & Vargo (2009), since the time when enterprises were able to produce large quantities of products, the need of an active marketing programme has aroused. In this situation it has become necessary for marketing managers to target customers, utilising the well-known method of Four Ps of marketing. The Four Ps of marketing, in its turn, is also known as a marketing mix and stands as the most fundamental marketing concept (Khan, 2014). The Four Ps stand for price, product, promotion, and placement.

This period is also known as a "marketing to" or outbound marketing, for the reason that customer was perceived as an external player for the company (Lusch & Vargo, 2009). In addition, according to Lusch & Vargo (2009), this period is concerned with the goods-dominant logic, which is focused on efficient production of output units. Customers in that case are perceived only as consumers, while a company is viewed as a producer of value and knowledge holder. Moreover, a company is tended to perceive itself as innovative and experienced, knowing better what is needed for its customers. Furthermore, in goods-dominant logic, the goods, or units of output, are viewed as a central element of exchange (Lusch et al, 2007).

On the other hand, in the new era, the approach has shifted from “marketing to” towards “marketing with”, where customers and other supply chain partners are understood as co-creators of value (Vargo & Lusch 2004; Lusch et al., 2007; Lusch et al., 2009). This approach is concerned with a service-dominant logic and, according to Vargo & Lusch (2004), service-dominant logic examines goods as appliances, and distribution mechanisms such as vehicles as a service provision. Based on this logic, all market offerings are considered as service offerings. Figure 6 explains goods-dominant logic and service dominant-logic, based on Lusch & Vargo (2009).

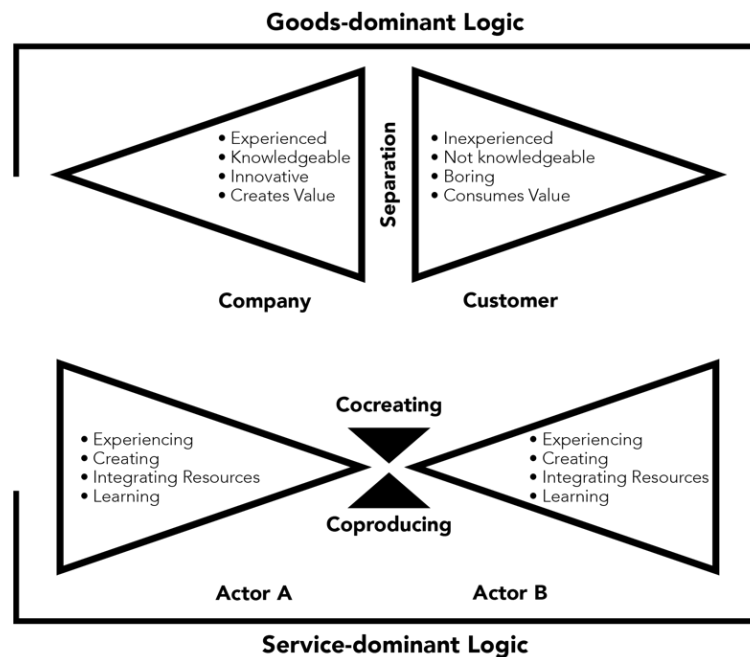


Figure 6. Goods-dominant Logic and Service-dominant Logic (Lusch & Vargo 2009).

As goods-dominant logic can be linked with outbound marketing, the service-dominant logic brings forth inbound marketing (Lusch & Vargo, 2009; Holliman & Rowley, 2014). Inbound marketing, which can also be viewed as co-producing marketing, is intended to be one of the most appealing opportunities for the firm to make their marketing programmes more efficient, increase financial performance and make better both customer and supplier relationships (Lusch & Vargo, 2009). Figure 6 illustrated that the separation gap in goods-dominant logic is merging with the help of cocreation and coproduction in service dominant logic. The company and its customer are acting as a united entity and benefiting from sharing experiences, co-creation, resource integration and learning from each other. It is possible to say that with inbound marketing customers are getting more and more involved in companies' business, which goes beyond traditional word of mouth (Lusch & Vargo, 2009).

Second, besides goods-dominant and service-dominant logic, marketing can also be observed from the perspective of how customers get to know about the company's offerings. Following this logic, outbound marketing can be seen as a process in which the company initiates the conversation with a customer, for example, through advertising, which is an impersonal way of communication describing the company's offering or the company itself (Lamb et al., 2000). Some typical outbound channels are advertisement, cold calls, and trade shows (Halligan & Shah, 2014). Casas (2016) also claims that traditional marketing communication is concerned with one-way outbound message from companies to their customers using such tools as TV, radio, print, outdoor, direct mail, and web banners. Outbound marketing is also referred as an interruption marketing. According to Rancati et al. (2015), outbound marketing is anticipated by traditional product promotion model and can be understood as an interruption-based marketing. In other words, customers or prospects have to stop their actions in order to pay attention to the marketing message.

Inbound marketing, however, can be described as a customer-oriented marketing methodology. In addition, inbound marketing is also focused on creating content that attracts and prompts customers to act first. Figure 7 illustrates inbound and outbound marketing approaches.

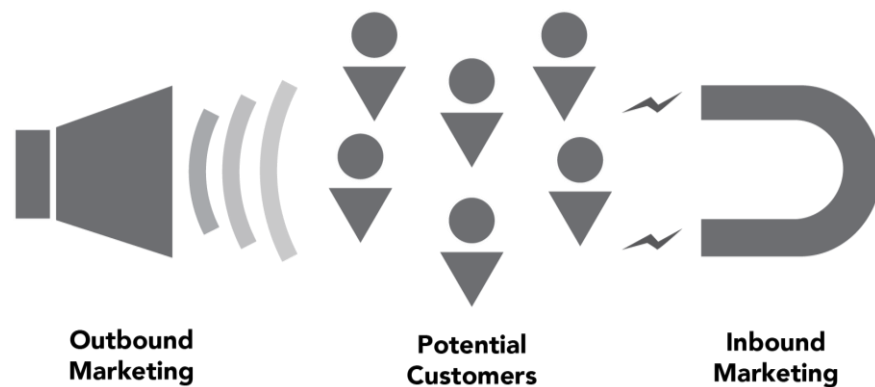


Figure 7. *Conceptual Representation of Inbound and Outbound Marketing.*

Furthermore, the content in the case of inbound marketing is mostly digital and various authors describe inbound marketing as digital inbound marketing (Avery et al., 2009; Caragher, 2013; Hawk, 2018; Patrutiu-Baltes, 2016). In more detail, inbound marketing can be described as a methodology that is about getting found by a potential customer through various digital content marketing techniques such as blogs, podcasts, eBooks, eNewsletters, web pages, white papers, search engine optimisation (SEO), and social media marketing (Avery et al., 2009; Caragher, 2013).

2.2 Inbound Marketing as a Digital Marketing Strategy

Previous section introduced and discussed inbound and outbound marketing following two perspectives. The first perspective was based on the concepts of service-dominant logic and goods-dominant logic, and the second perspective was concerned with how customers get to know about a company's offering. This section, first, discusses inbound marketing as a digital marketing strategy and second, discusses inbound and outbound marketing based on the tools used in these marketing methodologies.

Inbound marketing is tightly connected with digital marketing. To develop the discussion further, it is possible to give the definition of digital marketing. According to Kannan (2017), digital marketing is a technology-driven process of joint collaboration between firms and their customers in order to create, deliver, and sustain value for all the stakeholders. The collaboration here is a key word that "connects" digital and inbound marketing. In fact, Patrutiu-Baltes (2016) explains inbound marketing as a digital marketing strategy which is based on close relationships between a company and its prospects or customers, who in their turn express interest towards the company by their own will. Customer's interest, in this regard, is gained by utilizing high-quality content marketing (Patrutiu-Baltes, 2016). Hawk (2018) provides the following information about inbound marketing: "Inbound marketing earns someone's attention; it gets their permission to communicate with leads and has low monetary cost of acquiring clients". Table 1 illustrates the differences of outbound and inbound marketing, by observing different tools used in both approaches.

Table 1. Outbound and Inbound Marketing Main Tools.

	Tools		References
	Digital	Analogue	
Inbound Marketing	Search Engine Optimization Blog Webinar Social Media eBooks eNewsletters Whitepapers Visuals	Public Speaking Word of Mouth Visuals	Rancati et al., (2015); Hawk (2018); Caragher (2013); Halligan & Shan (2014)
Outbound Marketing	Search Engine Marketing Display Ads Advertisement Affiliate Programmes Direct mailing Visuals TV advertisement	Advertisement Cold calls Trade shows Visuals Radio	Hawk (2018); Halligan & Shan (2014); Rancati et al., (2015); Casas (2016)

As Table 1 describes, another way to showcase the differences between outbound and inbound marketing is to observe different tools used in these methodologies. Tools can also be divided on analogue and digital, which is based on how people receive information. For example, listening to the radio or live public speech and observing commercial banner is related to analogue form of receiving information. Based on Table 1, it is more visible that the tools related to outbound marketing are intended to interrupt the customer, or in another words, a company has to directly approach the customer with such tools. Inbound marketing tools, on the other hand, are focused more on attracting customers and providing pleasant experience which consequently prompts customers to approach the company by themselves.

Despite the fact that inbound and outbound are opposing marketing methodologies, there are some tools that are used in both. Rancati et al. (2015), in studies of inbound and outbound marketing techniques, illustrates an overlapping position of both approaches. Based on this survey and other sources (Casas, 2016; Hawk 2018; Rancati et al.), Figure 8 shows where tools for both marketing methodologies are overlapping.

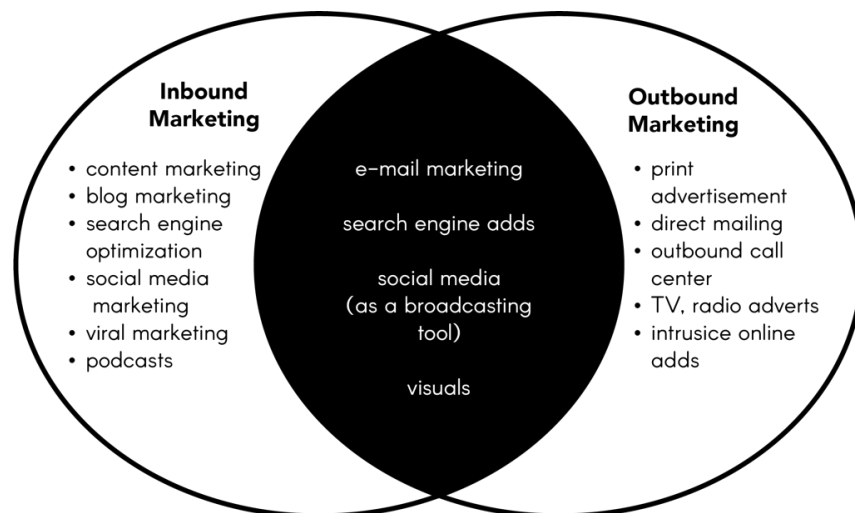


Figure 8. *Overlapping Tools of Inbound and Outbound Marketing (Rancati et al., 2015).*

As Figure 8 illustrates, both marketing methodologies can use similar digital tools. Moreover, for some companies it is beneficial not to stick with only one methodology but to use them in combination. For example, Hawk (2018) claims that there is a place for both approaches. However, it is suggested to use inbound marketing as a first one in order to build trust and relationships with potential customers. According to Rancati et al. (2015), the use of a certain marketing technique also depends on the company's resources, and for this reason, big companies should not neglect the opportunity to reach wider audience

with a traditional outbound marketing. In addition, Chordas (2012) describes three-dimensional marketing as a successful marketing strategy, where the three-dimensions stand for the usage of traditional, social, and digital media channels.

To conclude, inbound marketing can be defined as a methodology that is focused on building pleasant relationships with customers by creating a content that attracts and prompts customers to show interest towards the company by their own will. Outbound marketing, in its turn, is a traditional marketing methodology, where a company initiates the conversation with the customer by using the tools that may interrupt the customer from his/her current activity. Literature shows that both methodologies might use similar digital tools and in some cases the usage of both methodologies might be effective.

2.3 Content Marketing Definition

Previous sections were dedicated to inbound marketing. Different inbound marketing tools as well as the differences between inbound and traditional outbound marketing were discussed as well. This section discusses content marketing, considering its inter-connections with inbound marketing. In more detail, this section describes various definitions of content marketing and divides them on three different perspectives. In addition, this section also discusses content marketing objectives.

This thesis focuses on content marketing for several reasons. First, content marketing can be presented as an extensive part of digital marketing. For example, according to Chaffey & Smith (2013), inbound marketing can be presented as a combination of content marketing, search engine marketing, and social media marketing. Second, studies on content marketing have increased in recent years (Rancati et al., 2015; Keyes, 2006; Holliman & Rowley, 2014; Casas, 2016). Nevertheless, some authors claim that the subject of content marketing has not been studied a lot by researchers as there is no comprehensive theoretical framework on it (Zahra & Noruzi, 2018, Wang et al., 2017), and that most of the studies are done by commercial institutions (Järvinen & Taiminen, 2016). Third, the usage of content marketing in B2B sector is growing with a higher pace than before (Pulizzi & Handley, 2014; Gamble, 2016; Wang et al., 2017).

Continuing towards the definition, content marketing can be defined as an inbound marketing technique that is perceived to be a useful tool for achieving and sustaining confident brand status with an effective value-added content distributed via social media (Holliman & Rowley, 2014). Pulizzi (2010) defines content marketing as formation and distribution of content in different formats in order to attract and retain customers. In addition, content marketing is sometimes referred to as custom publishing, custom content or

branded content (Pulizzi, 2010). Furthermore, all the definitions of content marketing can be divided on three perspectives which are inbound perspective, sales perspective, and branding perspective. Table 2 lists definitions of content marketing from the inbound perspective.

Table 2. *Content Marketing Definitions (Inbound Perspective).*

Definition	Perspective	Author
Formation and distribution of a content in different formats in order to attract and retain customers	Inbound	Pulizzi (2010)
Anything that is created and distributed in order to share the story in a conversational and human way without an intention to sell		Handley & Chapman (2010)
Pull-strategy and attraction rather than an element of selling or advertising.		Lieb (2012)
The process of sharing expertise and knowledge with potential customers in order to establish relationships with them		Slater (2014)
Content marketing is used in order to attract customers by increasing their engagement and empowerment		Kucuk & Krishmurthy (2007)
Inbound marketing tactic that is concerned with creating valuable content based on the needs of potential buyers who already searched for the information regarding the product or service		Halligan & Shan (2010)
A practice of using informational and editorial content to bring attention and thought leadership in order to engage prospects and current customers		Lankow et al. (2012)

The majority of authors describe content marketing from the inbound perspective, focusing on customers attraction, engagement, pull-strategy and human way of building relationships with customers. For instance, according to Leib (2012), content marketing is an attraction element rather than a sales tool. Moreover, some authors state that content marketing should experience a shift from “selling” to “helping” (Holliman & Rowley, 2014; Jefferson & Tanton, 2013; Wang et al., 2017).

Nevertheless, sales leads are mainly used as metrics for measuring the efficiency of content marketing (Pulizzi & Handley, 2014). In addition, Wang et al. (2017), state that company can gain better sales opportunities if customers are engaged with the content.

Branding is another perspective on content marketing that is widely discussed in literature (Elisa & Gordini, 2014; Holliman & Rowley, 2014; Gunelius, 2011; Limani, 2018). According to Pulizzi & Handley (2014) study on content marketing trends, most of the B2B companies put brand awareness as the first objective for their content marketing strategy, with leads generation, engagement, and sales going after, respectively. Furthermore, Rose & Pulizzi (2011) define brand awareness as the main objective of content marketing. Elisa and Gordini (2014) explain content marketing as a strategy that is focused on improving behaviour and loyalty of prospects and customers by utilizing valuable content. Table 3 shows definitions of content marketing based on branding and sales perspectives.

Table 3. *Content Marketing Definitions (Branding and Sales Perspectives).*

Definition	Perspective	Author
Improving behavior and loyalty of prospects or customers by utilizing valuable content.	Branding	Elisa & Gordini (2014)
A marketing technique that is used to achieve and sustain confident brand status, utilizing value-added content in social media		Holliman & Rowley (2014)
The process of promoting a business or a brand directly or indirectly, using value-added text, video and audio content		Gunelius (2011)
Techniques for producing high-quality, relevant content to educate engage and acquire target customer with the main objective of sales	Sales	Ramos (2013)
The purpose of content marketing is to generate sales leads and supplement branding activities		Silverman (2012)

The perspectives on content marketing listed in Table 2 and Table 3 are tightly interconnected with content marketing objectives. Very often companies use sales funnels as frameworks to build their marketing strategies and outline marketing objectives. Rose & Pulizzi (2011) introduces content marketing funnel and content marketing business objectives used with this funnel. This framework is shown in Figure 9.

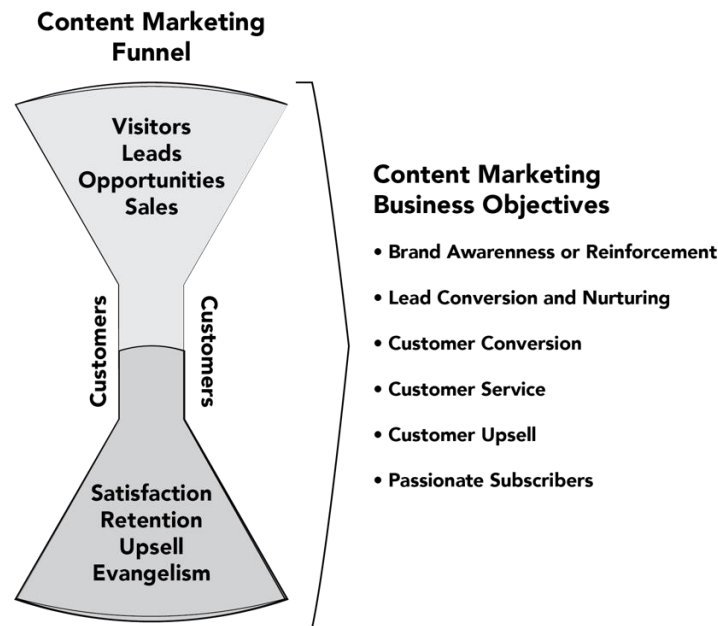


Figure 9. *Content Marketing Funnel and Business Objectives (Roze & Pulizzi, 2011).*

Figure 9 consists of two parts, with the left part representing the content marketing funnel. According to Roze & Pulizzi (2011), every organization has their own sales funnel using similar concept. For instance, D’Haen & van den Poel (2013) and Järvinen & Taiminen, (2016) describe very similar model of a marketing sales funnel. Content marketing funnel in Figure 9 is divided on two parts. Based on the funnel concept, the top part of the content marketing funnel shows that a company needs to generate visitors, which later can be transformed into leads, then in opportunities, and finally, sales. Afterwards, the process does not stop on sales, but continues with making customers more satisfied, which consequently leads to their retention, upsell, and evangelism.

Right part of Figure 9 illustrates content marketing business objectives. First, brand awareness or reinforcement conceptually represents a long-term strategy of content marketing that is considered as a more productive way to create an awareness for the company’s product or service than traditional advertising. Second, lead conversion and nurturing are meant to encourage potential leads to share more information about themselves, for example with sign-ups for events or subscriptions to e-newsletters. Third, customer conversion deals with an attraction of the important prospects, by illustrating how the company’s solution is better than the solution offered by its competitors. Fourth, customer service is related to how successfully a company can provide a value or reinforcement to their customers after the sale. Fifth, customer upsell is concerned with a more frequent communication with customers when the selling process has finished. It is done by creating constant ongoing engagement, which can provoke customer to spread more information about the company. Finally, passionate subscribers are another

source for content creation. Satisfied subscribers can exponentially increase marketing operations by creating their own content related to the company's activities.

As discussed, commercial institutions provide statistical information on what content marketing tools companies are using and how do they use them (Pulizzi, 2010; Pulizzi & Handley, 2014), but there is no theoretical framework on content marketing in general (Zahra & Noruzi, 2018, Wang et al., 2017). However, the study by Holliman & Rowley (2014) is focused on B2B industries, and talks about digital content marketing, which authors divide on three types. These types are: "Not-paid for" digital content marketing, "Paid-for" digital content marketing, and social digital content marketing. It is important to note that for this categorization Holliman & Rowley (2014) define digital content marketing as an activity that is concerned with "creating, communicating, distributing, and exchanging digital content that has value for customers, clients, partners, and the firm and its brands". The authors reflected their studies in a framework which is illustrated in Table 4.

Table 4. *Different Types of DCM (Holliman & Rowley, 2014).*

Types of DCM	Originator	Originator's key aim	User	User's key aim
"Not-paid for" DCM	Organization	Customer engagement and relationships; Product or service purchase or contract	Business client organizations; Consumers	Business purchase decision-making; Business intelligence; Consumer decision making and purchase
"Paid for" DCM	Organization	Customer engagement and relationship; Product or service purchases and sales of DCM	Consumers	Positive experience regarding digital product and its delivery
Social DCM	Brand community members	To express views; to learn from organization and other users	Organization	Market intelligence; Relationships and community building

According to Holliman & Rowley (2014), the two key concepts in terms of digital content marketing are value and community. Authors claim that the idea of "Not-paid for" digital content marketing is widely used in B2C in order to attract potential customers to the company's website and maintain brand community. "Paid-for content" is concerned with the sales generation from digital product for organization, and consumers are seeking for a pleasant digital product experience and delivery. Social digital content marketing is focused on the content generated by users and, for this reason, organization has to man-

age communicational channels within their media. The main idea of theoretical framework presented in Table 4 is to show the importance of digital content being valuable and useful for its users (Holliman & Rowley, 2014).

To conclude, this section focused on definitions of content marketing and content marketing objectives. It is possible to derive three perspectives on content marketing definitions, which are inbound, sales, and branding. In addition, content marketing strategy and content marketing objectives can be represented using a sales funnel model, which in this case was a content marketing funnel by Roze & Pulizzi (2011). Digital content marketing can be divided on “Not-Paid for”, “Paid for”, and social digital content marketing which is outlined in Different Types of Digital Content Marketing framework (Table 4) by Holliman & Rowley (2014).

3. DIGITAL CONTENT IN DIFFERENT MEDIA

3.1 Types of Media

Previous section described content marketing, its definitions and different perspectives on them. It also discussed content marketing business objectives using the sales funnel by Roze & Pulizzi (2011) and digital content marketing types framework by Holliman & Rowley (2014). This section discusses the content itself and presents the way to categorize it on three main groups called media.

Holliman & Rowley (2014) state that content is a main component of inbound marketing and companies should pay special attention to it as it is a core for the development of an effective marketing strategy. Chaffey & Ellis-Chadwick (2012) also suggest that content takes a central role within inbound marketing and defines it as a valuable information presented to the viewer in a form of text, image, audio, and video. One common way to categorize the content is to divide it on paid, owned, and earned media (Leib et al., 2012), which is shown in Figure 10.

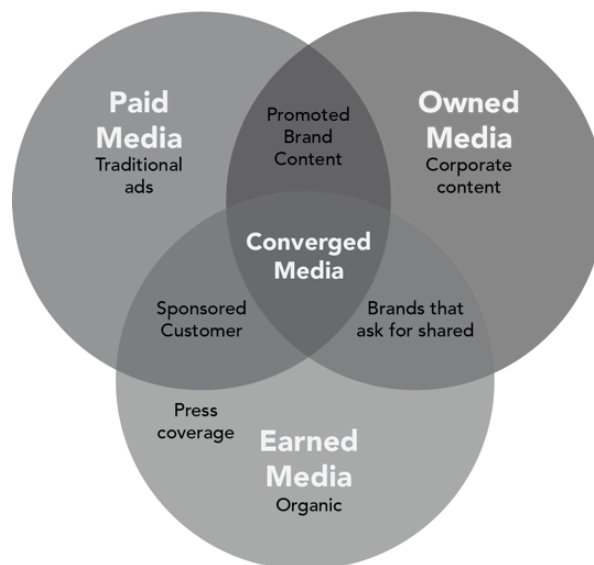


Figure 10. Three Types of Media (Leib et al., 2012).

Leib et al. (2012) claim that there is a combination of these three types of media which is called converged media. In addition, various authors mention similar PESO model (Macnamara et al., 2016; Luttrell, 2014; Bayles, 2015; Dietrich, 2015; Xie et al., 2018) for media strategy, which stands for Paid, Earned, Shared and Owned media. Macnamara et al. (2016) also mention this categorization as “four quadrants”. Nevertheless, this thesis sticks with the model proposed by Leib et al. (2012).

Discussing the model further, paid media includes content that company places as an advertisement on other media resources that is not controlled by the company (Leib et al., 2012). Macnamara et al. (2016) explain paid media as a traditional advertising and content that is agreed between the company and other media companies on a commercial basis. Furthermore, according to Xie et al. (2018), paid media can be defined as a media “you have to pay to place”. Xie et al. (2018) also gives an example of tools used in paid media. These tools are sponsored posts, paid search, native advertising, paid influences, and real-time advertising.

Earned media represents the content that is created and shared by the customer and is related to a company’s business (Leib et al., 2012). According to Macnamara et al. (2016) and Stephen & Galak (2012), earned media can be explained as an editorial publicity that organization gains with the help of media releases and other media activities. Examples of earned media could be traditional news coverage, influencer and bloggers’ mentions, and consumer sharing of the content (Xie et al., 2018). In addition, Florès (2014) states that within the earned media, customers can be considered as “channels” in which the company has little control over.

Owned media represents the type of content that the company completely controls (Leib et al., 2012). This content can be, for example, website or company’s owned social media and all the content available on these resources. Macnamara et al. (2016) list corporate magazines, newsletters, reports, organizational websites, blogs and official Facebook page as an examples of company’s owned media. According to Xie et al. (2018), owned media can be explained as anything that a company creates in order to share its story. In addition, literature mentions shared media (Macnamara et al., 2016; Luttrell, 2014; Bayles, 2015; Dietrich, 2015; Xie et al., 2018). For instance, Xie et al. (2018) define shared media as any place that allows to establish dialogue with the customer online. Most popular shared social media channels are Facebook, Twitter, LinkedIn, Instagram, YouTube (Xie et al., 2018; Halligan & Shan, 2014; Caragher, 2013). As the official social media pages belong to companies, shared media is considered as a subdivision of company’s owned media.

Converged media uses two or more channels of paid, earned or owned media. Leib et al. (2012) claim: “Converged media is characterized by a consistent storyline, look and feel”. Converged media types work in alliance in order to allow brands to reach their customers how, when, and where they want regardless of the channel. Moreover, literature shows that media practices are blurring because of the convergence of media (Macnamara et al., 2016; Xie et al., 2018). For example, social media can be seen as a good example of converged media, as they have evolved dramatically from being just personal

blogs to the platforms that contain various types of content, official company pages, marketplaces, and HR mechanisms.

In fact, social media marketing is considered to be an evolving trend. For example, Simon et al. (2013) discusses brand creation process on Facebook, while Hassan et al. (2016) describe the value creating behaviour in social media. Mochon et al. (2017) mention that Facebook page creates both social interactions which are customer-initiated and promotional communications that are initiated by the company. Figure 11 represents social media platform as a converged media.

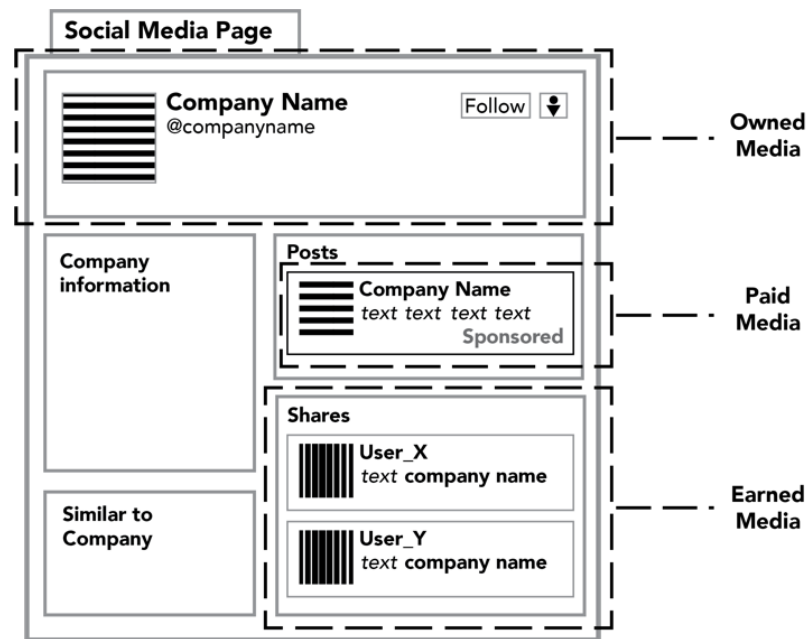


Figure 11. Social Media Page as an Example of Converged Media.

Figure 11 illustrates an example of social media page. As shown, the page contains all the three types of media. The page itself can be referred as owned media, also the header of the page explains that it is company's official social media page. In the posts section of the page, however, there is an example of sponsored post, which belongs to paid type of media. The shares section illustrates the information that other users mention about the company, which belongs to earned media.

According to the discussed information, it is possible to propose that the types of media framework illustrated on Figure 10 can be presented in a more detailed view. In order to do so, it is possible to list what kind of tools are used in different media. Figure 12 shows more detailed view on types of media framework.

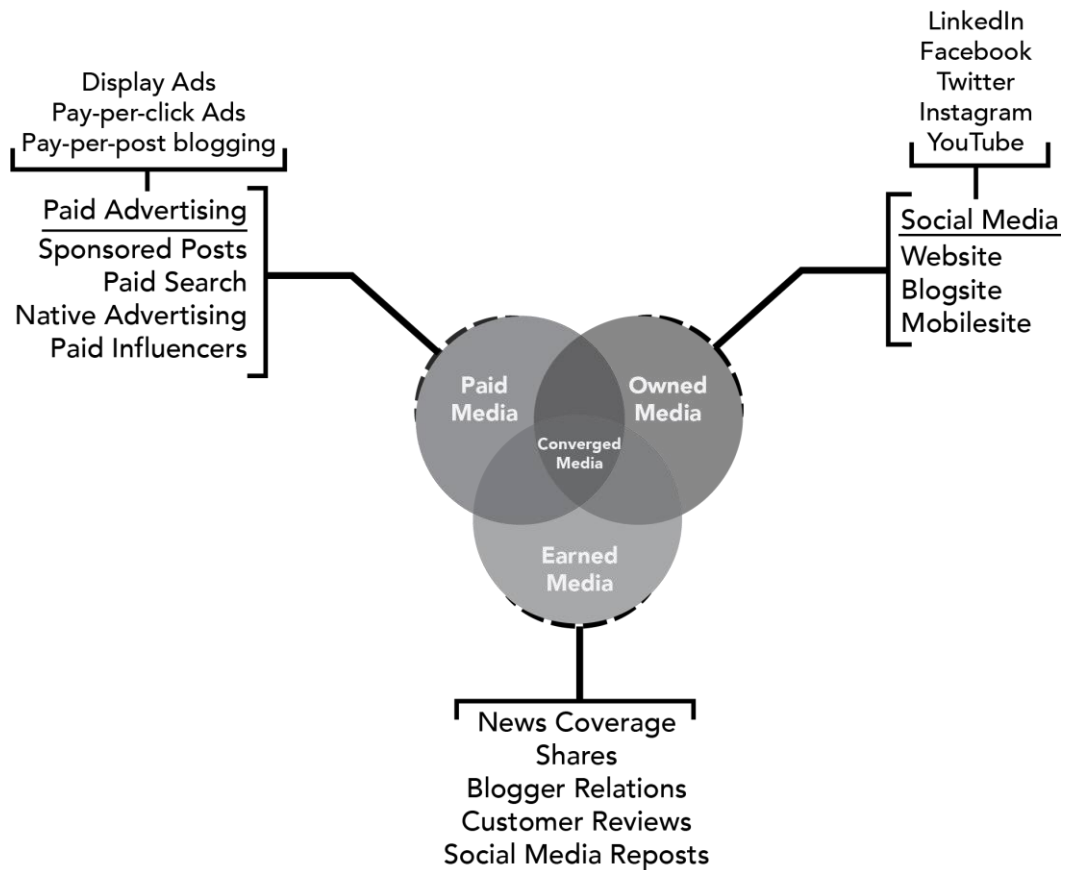


Figure 12. *Types of Media – More Detailed View.*

Figure 12 is intended to give a broader view on types of media. It is also possible to give more examples of each media type, but many of them are presented mainly in blogosphere and not described in research literature. Furthermore, media in their definition might vary depending on various reasons, for example, based on geographical location. Xie et al. (2018) demonstrate how the definitions of paid, owned, earned and shared media vary between China and United States. Nevertheless, this thesis sticks with the concepts reflected in the framework in Figure 12.

To conclude, this section discussed that content can be categorized on paid, owned, and earned media. The combination of these media is called converged media and social media page can be seen as an example of converged media. In addition, this section also described the tools used in these media and, in doing so, provided a more detailed view of Types of Media framework by Leib et al. (2012).

3.2 Digital Content in Media Types

Previous section discussed types of media in order to categorize the content in general. This section discusses the question on what the digital content is itself. This section also

lists several definitions in research literature of digital content and explains the differences between media types, media tools, and digital content. In addition, this section discusses blogs, infographics, videos, and white papers to give an even broader perspective on digital content.

The types of media framework in Figure 12 gives broader perspective on a content. However, this framework is more often used in order to create marketing strategies and categorize company's resources as different media types (Macnamara et al., 2016). In other words, media types can be seen as platforms and such things as paid advertising or social media are media tools that are used in these platforms. The content itself, in its objectified form, can also be presented as an element that is used on these media tools. This type of content is usually simply referred as digital content. For example, an infographic will be the type of digital content that is used in social media which is a part of owned media. Figure 13 clarifies the relationships between media types, media tools, and digital content.

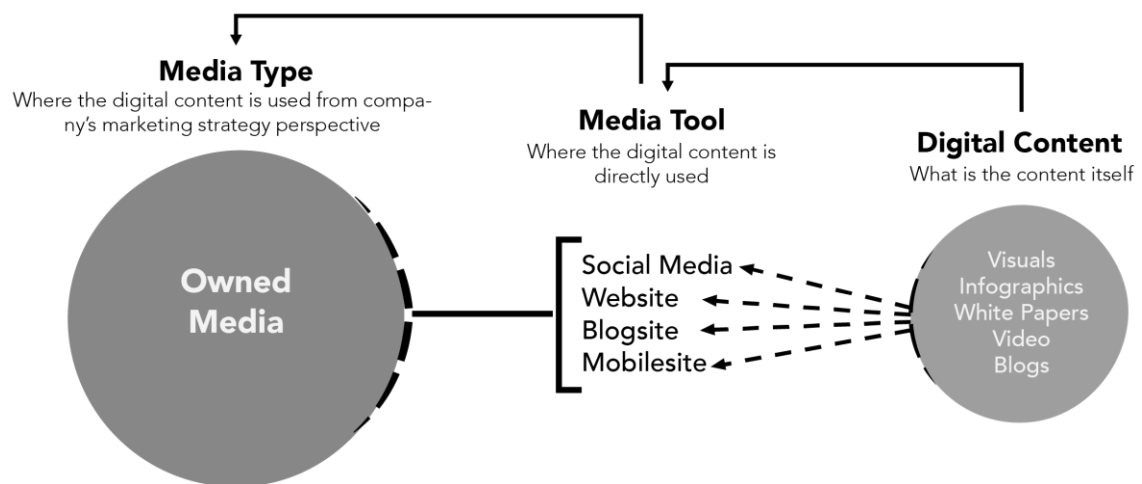


Figure 13. Relationships Between Media Types, Media Tools and Digital Content.

Figure 13 can be seen as a hierarchy of media and content. Media type represents the whole scope of content from a company's marketing strategy perspective, and owned media is used here as an example. Social media, website, blogsite, and mobilesite are media tools used in owned media. Finally, there is a digital content (for example, visuals or blogs) that is used in different media tools, such as the company's website or social media.

The digital content itself, in its objectified form, is not widely described by marketing literature, but there are some definitions. For example, Koiso-Kanttila (2004) provides two perspectives on digital content. First, digital content is a bit-based object distributed over electronic channels, where channels are wired and wireless networks. Second, practitioners explain digital content as a value-added services or mobile services distributed

through wireless network (Koiso-Kanttila, 2004). Holliman & Rowley (2014) also refer to practitioners and define digital content as any kind of information delivered over the Web, over the Internet or any kind of social network. Chaffey & Smith (2013) claim that digital content can be divided on static and dynamic rich media content. Webpage represents an example of static content, and videos, podcasts, and user generated content are examples of dynamic rich media content.

Most often marketing literature describes dynamic rich media content. For example, Holliman & Rowley (2014) use videos, written text, graphics, and slides as digital content examples. According to Chaffey & Smith (2013), the most popular types of digital content are pictures, videos and animations, e-books, white papers, podcasts, webinars, infographics, blog texts, and social media posts (Järvinen & Taiminen, 2016). Pulizzi & Handley (2014), in their analysis on B2B marketing trends, claim that the most popular digital content types used in B2B industry are social media content other than blogs, eNewsletters, website articles, videos, and case studies. To give a broader perspective on digital content, some of the digital content types are described below.

First, infographics belongs to the group of content called visuals (Gamble, 2016). Another types of digital content that belongs to visuals are pictures, photos, videos, and animations (Gamble, 2016). In addition, Manic (2015) describes illustrations, comics, and videos as the main types of visual content. Moreover, the subgroup of content marketing that deals with visuals is called visual marketing, but it is mentioned mostly by blogosphere and not by research literature. For instance, Langton & Campbell (2011) state that current marketing literature does not provide a lot of information on the interceptions between visuals and marketing in terms of how visual design influences buying behaviour. As for the infographics, according to Lankow et al. (2012), infographics is an abbreviation of “information graphic” and the purpose of the infographics is to use visuals in order to communicate the information. The authors also stated that infographics as a term has gained its popularity due to the extensive usage of it in marketing (Lankow et al., 2012). Several examples of infographics are presented in Figure 14.

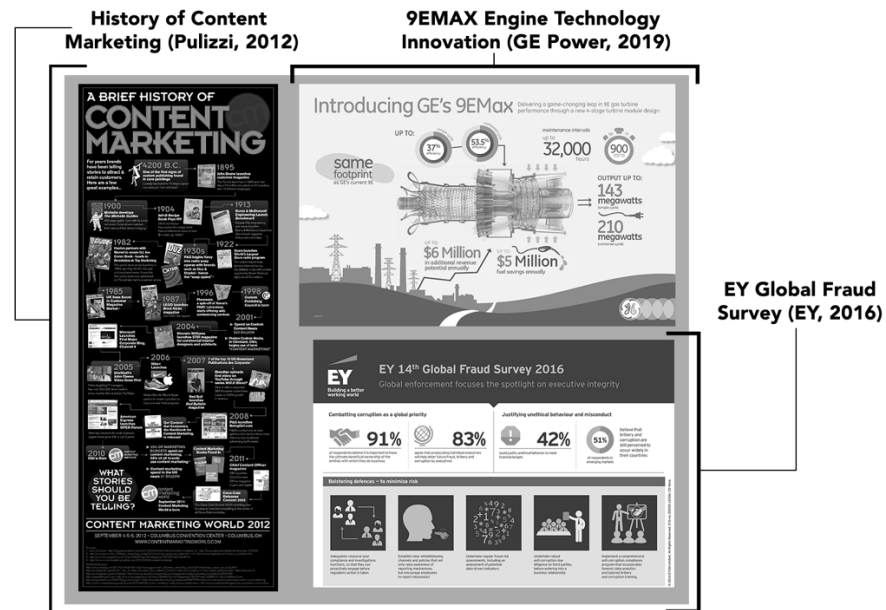


Figure 14. Examples of Infographics.

Figure 14 illustrates examples of infographics created by companies from different industries. Pulizzi (2014) defines infographics as a visual data in a form of a chart, graph or other form of illustration that is capable of showcasing the relationships between different fragments of information. Another definition of infographics is provided by McAlindon et al. (2018), who describe infographics as a data visualization product that explains stories in attractive ways. For example, the goal of the History of Content Marketing infographic was to promote the growing event organised by Content Marketing Institute (Pulizzi, 2012). Infographics of GE explains technical capabilities of the company's new 9EMAX engine and EY infographics summarizes the results of 46-page survey in one illustration.

Second, another widely used type of digital content is a blog, which is a short version of a “weblog” and it is intended to briefly present portions of periodically refreshed content (Pulizzi, 2012). More detailed definition of a blog is a regularly updated web-based page that contains information revolving around particular subject with an addition of commentaries, event descriptions, and links to other websites supporting this subject (Li & Du, 2011; Stephen & Galak, 2012; Takur & AlSaleh, 2018). Literature also provides information that social media such as Facebook, Twitter or Instagram can be referred to as blogs and user-generated content within these platforms is understood as blogging activity (Takur & AlSaleh, 2018). Figure 15 draws several examples of blogs.



Figure 15. Examples of Blogs.

As Figure 15 shows, Deloitte, for example, shares a blog dedicated to Future of Works, where various specialists from the company create posts about the subject (Deloitte, 2019). Caterpillar has a blog about innovation for dredging, ports, and waterways on their website (Caterpillar, 2019). Schneider Electric represents an example of a blog on LinkedIn social media, which is cited as one of the best blogs in 2018 (LinkedIn Marketing Solution Blog, 2018). It is also possible to note that blogging nowadays is relevant not only for personal but for professional context as well because many companies gain information from user-generated blogs. In fact, as mentioned various times in this thesis, the information on content and inbound marketing is widely spread in blogs rather than in the research literature (Takur & AlSaleh, 2018). Handley & Chapman (2010) claim that blog can be a hub for the content a company creates and also for press mentions or/and content generated about the company elsewhere. In terms of a blog placement, a company can account a separate webpage on its official website for it and also share blog posts on social media.

Third, according to van Esch & Mente (2018), video-enabled social media is at the lead of the people's interactions and information transfer. Manic (2015) explains videos as short films that tell a story or transmit certain message. Videos are communicational marketing tools that are intended to increase sales and profits, and inform consumers about companies' products (Anderson, 2007; Costa-Sánchez, 2017). Costa-Sánchez (2017) mentions that videos can be used by brand in order to create communities, generate affection, show products or services, and capture customers. Also, Pulizzi (2012) gives information that such resources as YouTube and Vimeo have dramatically simplified uploading and sharing video content which previously was one of the biggest web

challenges. In addition, Bowden (2018) provides insights on why videos are useful in online marketing:

- **Traffic Generation.** Videos are helpful to generate traffic to a blog or any other online property.
- **Product Creation.** Buyers might appreciate having videos packed together with the product.
- **Sales Presentations.** Videos can increase sales and conversions in online pages.
- **Teaching.** Videos can be a better explanatory content than written or verbal instructions.
- **Reviews.** Video reviews are better selling tools than written reviews.
- **Website Content.** The popularity of video blogging has created a situation when people are looking for a content in this format, which makes it even more appropriate for blogs and websites.

It is important to mention again that overall a research literature on video content marketing is even less than for other content types, but there are many insights regarding the usage of videos in blogosphere. Nevertheless, Bowden (2018) also mentions that online video content is highly increasing in popularity and is perceived as one of the most effective methods for promoting brands. Furthermore, videos are beneficial due to their dynamics and ability to appeal to peoples' emotions (Manic, 2015).

Finally, white papers are widely used in B2B marketing communications. Campbell & Naidoo (2017) mention that white papers are commonly used documents in corporate environment that are mainly created for the reason to market high-tech products by for-profit organizations. In addition, white papers are used not only for the reason to enhance sales, but also to inform and educate customers, which can be related to inbound approach (Campbell & Naidoo 2017; Willerton 2008; Lagerwerf & Bossers, 2002). For instance, Willerton (2008) states that white papers with the focus more on selling rather than explaining are likely to be rejected. In addition, according to Lagerwerf & Bossers (2002), marketing white papers should look more like business proposals, where informative rather than persuasive style is preferred (Campbell & Naidoo, 2017).

To conclude, this section described the relationships between digital content, media tools, and media types. First, digital content, in these relationships, represents the content itself (for example, visuals, infographics, video). Second, media tools are digital resources or media in which the digital content is directly used (for example, website, social media page). Finally, media types represent media in broader scope from a company's

marketing strategy perspective (for example, owned media, paid media, and earned media). In addition, this section discussed infographics, blogs, video content, and white papers as examples of digital content.

3.3 Digital Inbound Content as a Marketing Tool.

Based on the reviewed literature, modern digital content has gone beyond traditional marketing orientation that is focused mainly on sales generation. As pointed out, digital content in modern marketing is created to be visually appealing, informative, and educative for the potential customer. Even if the digital content, such as for example infographics, is intended to explain the features of the product – generating sales is not the first goal of it. To elaborate even more on inbound and content marketing, this thesis proposes a concept of digital inbound content. Figure 16 demonstrates this concept.

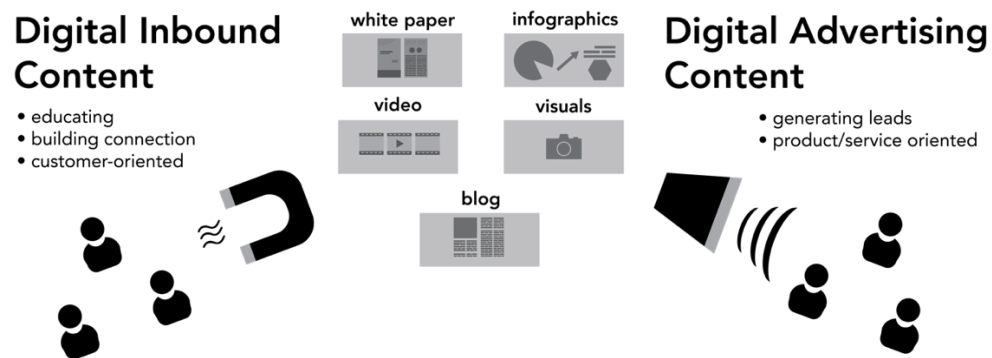


Figure 16. *Digital Inbound Content.*

As was mentioned by various authors (Avery et al., 2009; Caragher, 2013; Hawlk, 2018; Patrutiu-Baltes, 2016), inbound marketing is highly concerned with using digital content. Moreover, it was also mentioned that both inbound and outbound marketing methodologies might use the same digital content tools (Rancati et al., 2018), as it is shown in Figure 8. However, digital inbound content differs from the general digital advertising content in terms of its intentions, which is demonstrated in Figure 16.

Inbound marketing is a methodology that is focused on building pleasant relationships with customers by creating a content that attracts and prompts customers to show interest towards the company by their own will. In addition, various authors (Lusch & Vargo, 2009; Holliman & Rowley, 2014) state that inbound marketing is concerned with service-dominant logic which, in its turn, is more customer-oriented. Taking into consideration these concepts, digital inbound content should be created and used with an intention to educate the community, build strong brand identity for the company, and establish closer collaboration with customers. Furthermore, digital inbound content can be defined as a value-added content in an electronic form that is created and used in an inbound way. In

contrary, the content that is more about the product or a service, with the main goal to generate leads, can be called digital advertising content.

This thesis proposes that digital inbound content can be used as a main tool for content marketing strategy. Previously, this thesis introduced the content marketing funnel by Roze & Pulizzi (2011) that is used as a marketing framework and outlines business objectives of content marketing. The funnel describes how content can be used in order to generate leads and later sales. However, this framework does not describe what kind of content is specifically used. Figure 17 shows the idea of digital inbound content being a main tool for the content marketing funnel.

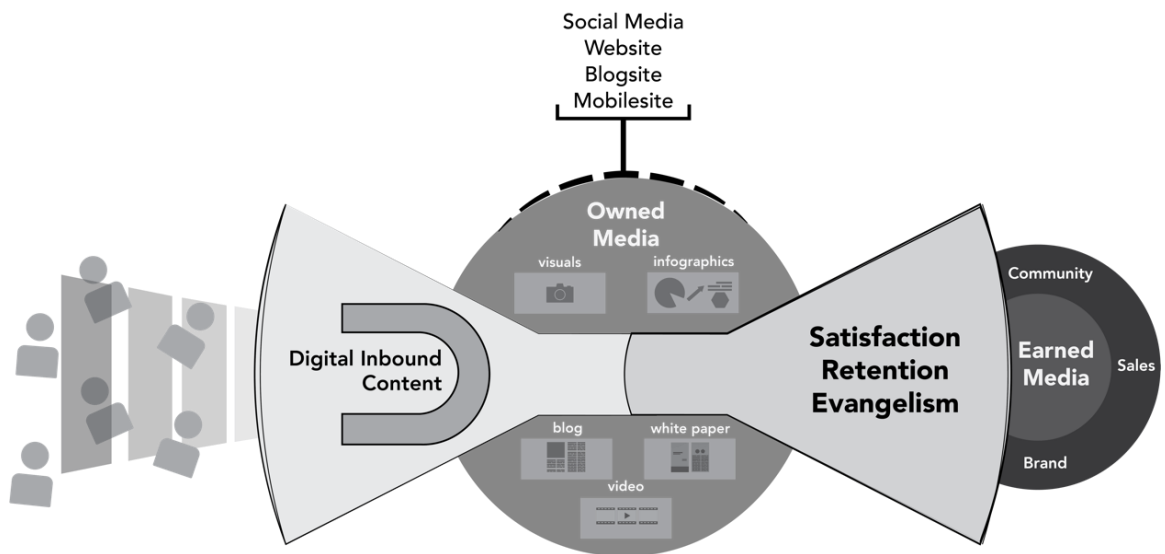


Figure 17. *Digital Inbound Content as a Content Marketing Tool.*

As Figure 17 explains, digital inbound content stands as a tool to pull in and attract customers. The main media type for digital inbound content is proposed to be owned media, as it does not require a permission for the company to use the content on its own digital platforms, which allows to create as much content as the company wants. According to Roze & Pulizzi (2011), the content marketing funnel is intended to satisfy and retain customers, which can be enhanced with an inbound methodology. In addition, customers satisfaction and retention can be enhanced even more with an educational and customer-oriented content, which customers or other parties might use on their media sources, consequently increasing a company's earned media.

Overall, this section discussed the differences between digital inbound content and digital advertising content. Digital inbound content is more customer-oriented and intends to educate and build connections with customers. Digital advertising content, in its turn, is a tool to generate leads and describe the company's offering. In addition, the concepts of digital inbound content, content marketing funnel by Roze & Pulizzi (2011), and the

concepts of owned and earned media were utilized to construct a framework of digital inbound content as a content marketing tool (Figure 17).

4. CUSTOMER VALUE OF DIGITAL INBOUND CONTENT

4.1 Customer Value Definition

Creating and communicating customer value are one of the most important tasks in marketing (Kumar & Reinartz, 2016). Smith & Colgate (2007) note that main marketing objective is to achieve personal, organizational, and societal goals, which is only possible to do by creating superior customer value for a particular market segment. Many literature sources highlighted that customer value stands as a key factor for a business success (Khalifa, 2004; DeSarbo et al., 2010, Laitamäki & Kordupleski, 1997; Woodruff, 1997; Porter, 1996; Wyner, 1996; Milgrom & Roperts, 1995; cited from Karimian Pour, 2015) and also customer value is a subject that is repeatedly reviewed in marketing literature (Anderson 1998; Anderson et al., 1993; Monroe 1971; Wilson 1995; Zeitnaml, 1988, cited from Kumar & Reinartz, 2016). In addition, Khalifa (2004) gives information that customer value is strongly connected with customer loyalty, which, in its turn, results in a better profitability.

Study by Khalifa (2004) synthesizes the literature on customer value available at a current time and defines three main customer value models. These models are value-component models, utilitarian or benefit/cost ratio models, and means end models. Khalifa (2004) also claims that these models are not complete themselves and focusing more on one aspect of customer value, while other dimensions are not taken into consideration.

First, value-component models are breaking the concept of customer value into various elements. Kaufman (1998, cited from Khalifa 2004), for example, claims that esteem value, exchange value and utility value together constitute the customer value. According to Kaufman (1998), esteem value appeals to the desire of purchase, exchange value appeals to the conditions where a customer is going to use the product, and utility value describes product's performance and physical attributes.

Another example of value-component model is Kano's model of customer perception. This model divides value components on dissatisfiers, which represent the attributes that are expected to be in the product or service, satisfiers, which are the attributes that meet performance needs and requested by the customers, and delighters – attributes representing new or innovative features (Khalifa, 2004). The model is useful for product or

process development (Khalifa, 2004). Moreover, the studies using Kano's model are drastically increased in recent time (Lin et al., 2017). Figure 18 shows an example of Kano model by Khalifa (2004).

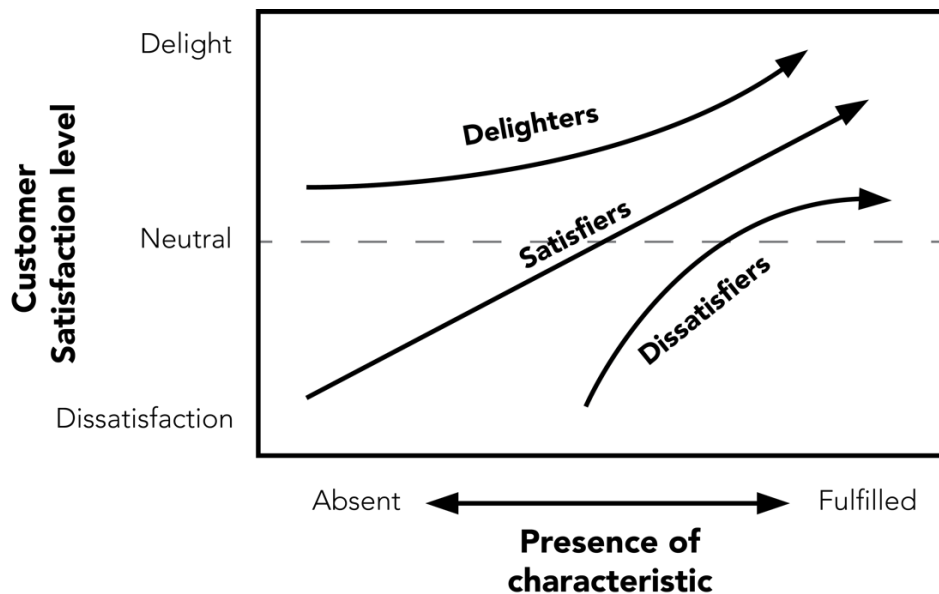


Figure 18. Customer Perception Model i.e Kano Model (Khalifa, 2004).

It is possible to note that, due to the increased usage of Kano's model in product and process development, the model itself has evolved. For example, Högström et al. (2010, cited in Paraschivescu, 2012) outlines reverse component, which will be opposite to satisfiers. Even more detailed fragmentation is proposed by Yeh (2010, cited in Paraschivescu, 2012), in which the author adds more dimensions from delighters to dissatisfiers, and points out quality attributes with low and high levels of importance.

Second, benefit-costs models are focused on customers' perception of benefits with the relation to sacrifices, in which benefits are tangible and intangible characteristics of a product or service (Monroe, 1990; Gale, 1994, cited in Khalifa, 2004). Sacrifices are costs and time effort needed to acquire and use the product or service (Khalifa, 2004). According to Horovitz (2000, cited in Khalifa 2004), the "value receiving" process happens when benefits from a product or service exceeding the costs of purchase and usage. In addition, Khalifa (2004) introduces value exchange model that combines the aforementioned concepts and outlines the differences between total benefits and total sacrifices which constitute customer value. The model is presented in Figure 19.

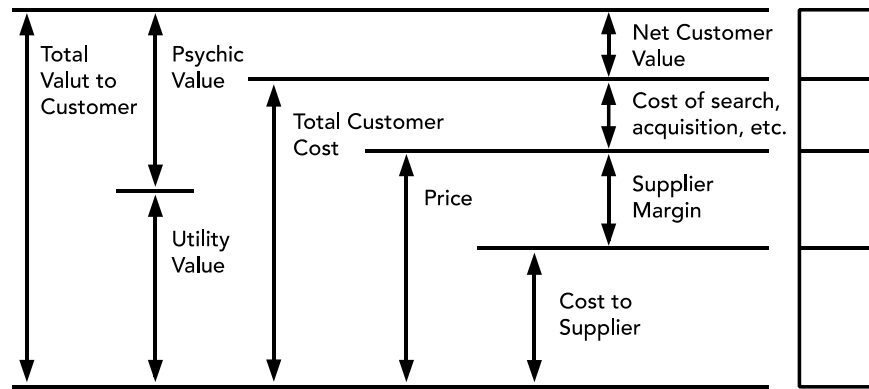


Figure 19. Customer Value in Exchange (Khalifa, 2004).

Figure 19 shows that supplier has some costs in order to produce product or service. Based on these costs supplier adds margin and sets the price for the offering. The total customer cost will consist from price components and the cost of searching and acquisition. The total value that customer expects should be higher than total customer cost. Total customer value consists of psychic and utility values and the difference between total customer value and total customer cost will be the net customer value. Another example of cost-benefit model will be the perceived customer value framework presented by Lyly-Yrjänäinen et al. (2019). The framework is shown in Figure 20.

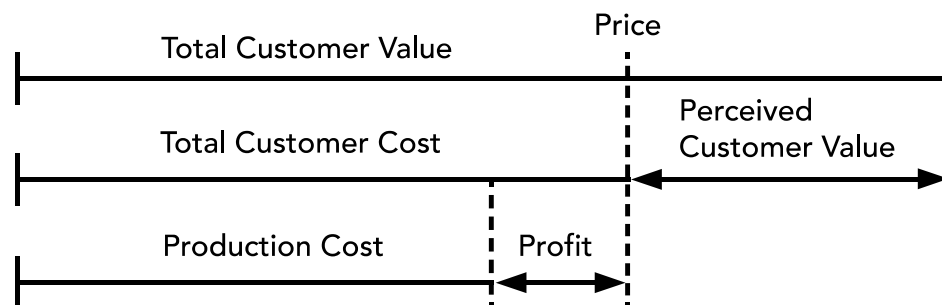


Figure 20. Perceived Customer Value (Lyly-Yrjänäinen et al., 2019).

According to Lyly-Yrjänäinen et al. (2019), total customer value is a monetary value of economic, functional and psychological benefits that customer gets from a product or service. In order to get the value, customer has to pay the price. Furthermore, customer has to pay the usage and disposal costs, which together with the price constitute the total customer cost. The perceived customer value in this case will be the difference between total customer value and total customer cost.

Third, means-end models are based on the assumption that customer would like to accomplish certain goals, or ends in this case, while using the product or service. Means can be understood as products or services and ends are presented as important personal values of consumers (Khalifa, 2004). Example of a means-end model can be

Woodruff's (1997) customer value hierarchy model. The model demonstrates desired and received customer value, using customer value hierarchy illustrated in Figure 21.

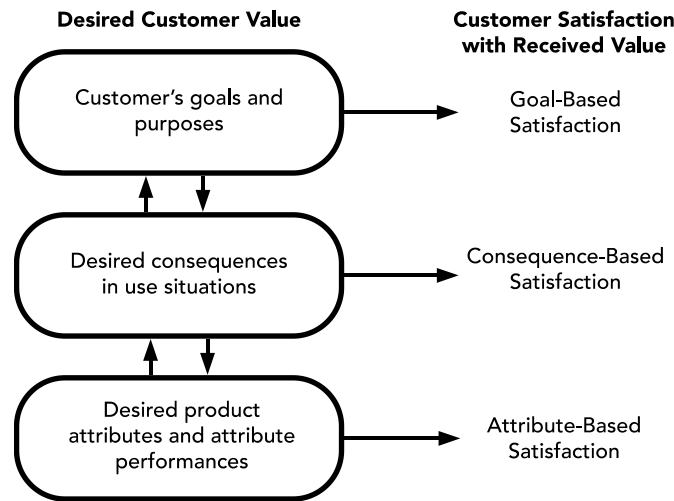


Figure 21. *Customer Value Hierarchy Model (Woodruff, 1997).*

Based on Woodruff's (1997) model, it is possible to observe how value moves up and down in hierarchy, explaining customer's desired and received values. In addition, customers prefer the consequences that will help them to achieve their goals (Woodruff, 1997). In general, according to Khalifa (2004), means-end models help to explain how customers select between alternative products or service, based on the benefits these products or services offer. Next section discusses customer value creation model by Smith & Colgate (2007) as the main customer value model in focus by this thesis.

4.2 Customer Value Creation Framework

Apart from studies by Khalifa (2004), there are other perspectives on the definition of customer value. For example, some authors define customer value from the perspective of "trade-off", meaning that customers receive something in exchange for how much they pay (Anderson & Narus, 1998; Anderson et al., 2007; Sawyer & Dickinson 1984; Gale, 1994; Day, 1994; Zeithaml, 1988). Anderson & Narus (1998) define customer value in business markets as a worth of technical, economic, service and social benefits in monetary terms that customer gets for the price he/she pays.

Another definition is provided by Butz & Goodstein (1997). The authors state that customer value is an emotional bond between a customer and a company, after the customer has used product or service provided by the company and determined the added value of it. Customer value can be observed as a dual concept. This perspective is explicitly described by Kumar & Reinartz (2016) who state that customer value should be considered as a value for the customer and value for the company. First, company has

to create value for their customers in a form of perceived customer value. Second, company has to extract some of the customer value in a form of profit, by doing so, creating the value for the company itself.

One of the most extensive model of customer value is Smith & Colgate (2007) customer value creation framework. Authors combined various different perspectives on customer value, also taking into consideration most of the definitions mentioned previously in this thesis. Table 5 below illustrates shorter version of the framework, and the full version is presented in Appendix 1.

Table 5. *Customer Value Creation Framework (Smith & Colgate, 2007).*

Sources of value	Types of value			
	Functional/Instrumental	Experiential/Hedonic	Symbolic/ Expressive	Cost/ Sacrifice
Information	Informs/educates; performance/outcomes realization	Enhance sensory, emotional, relation, epistemic experiences	Product positioning; identity with product, meaning interpretation	Less stressful decisions; lower prices; makes more informed
Products	Features/functions	Sensory, emotional, relational, epistemic experiences	Personal meaning; self-expression	Operating cost, assembly, ease of use, warranty
Interactions	Enhance desired performance and outcomes	Service attributes provide sensory, emotional, epistemic experiences	Personal meaning; privilege interactions – status and prestige	Reduce economic, psychological cost; increase/reduce personal investment
Environment	Decorative features contribute to functional/instrumental value	Features of the purchasing or consumption can provide sensory, emotional, epistemic experiences	When product is consumed – social, personal, sociocultural meaning, self-worth, and expression	Contributes to the economic cost of the product, psychological cost, personal investment, risk
Ownership	Correct, accurate, and timely fulfillment processes; provide functional/instrumental value	Fulfilling delivery promises can enhance customer experiences – pride of ownership, product potency	How and by whom product is delivered can create symbolic value	Can be enhanced with payment terms, delivery options, return policies and others

According to Smith & Colgate (2007), there are four major types of value which are: functional/instrumental, experiential/hedonic, symbolic/expressive, and cost/sacrifice. First, functional/instrumental value is focused on product's desired attributes, or in other words, how useful is the product or service. Woodruff (1997, cited in Smith & Colgate, 2007) claims that the three key points of this type of value are appropriate features, appropriate performance, appropriate outcomes and consequences.

Second, experiential/hedonic value concentrates on experiences, feelings and emotions created by the product or service. Main attributes of this type of value are sensory value, emotional value, epistemic value, and social-relational value. It is important to note that, according to Smith & Colgate (2007), social-relational value is usually in focus by service and B2B sectors.

Third, symbolic/expressive value is about psychological meaning that customer assigns to the product or service. Main attributes related to this type of value are self-meaning, self-worth, personal meaning, self-expression, social meaning and symbolic meaning.

Finally, cost/sacrifice value is focused on minimizing costs and sacrifices customers might have throughout the purchasing process. This type of value is concerned with minimizing economic costs (such as product price or operating costs), minimizing psychological costs (such as cognitive difficulty or stress), minimizing personal investments (such as time and energy), and reduction of risks related to purchase or usage.

Five sources of value are information, products, interactions, environment, ownership/possession, and transfer. First, information is concerned with advertising, public relations, and brand management activities. Second, products as a source is concerned with such activities as product development, market research, and production. Third, interaction happens during such processes as recruitment, training, and service quality operations. Fourth, environment is created with such activities as facility management, interior design, and merchandizing. Finally, ownership as a source of value is correlated to accounting, delivery, and transfer. Importantly, Smith & Colgate (2007) described the main applications of the framework as a tool for creating generic marketing strategies. In addition, it is useful in developing product concept specification, identifying value creation opportunities, and developing measures for customer value (Smith & Colgate, 2007). Furthermore, authors note that the framework was done with an intent to suit both consumer and business markets.

4.3 Digital Inbound Content as a Source of Value

Previous section discussed customer value creation framework by Smith & Colgate (2007). This section intends to build the concept of customer value of digital inbound content, mainly based on customer value creation framework by Smith & Colgate (2007), and also taking into consideration the dual perspective on customer value. As discussed, digital inbound content is a type of content that is created in order to be used in an inbound way, meaning that it is customer-oriented and educational. This type of content is

not focused entirely on company's offering, but rather on the industry where the company operates and, most importantly, the customer.

Customer value creation framework by Smith & Colgate (2007) presents four types of value, which are functional/instrumental, experiential/hedonic, symbolic/expressive, and cost sacrifice. On the one hand, it is possible to propose that digital inbound content could represent an information source of value. Nevertheless, digital inbound content in many cases does not directly tell about the company's offering, features or values, but instead focuses on a customer and describes the industry where the company operates. Moreover, there are certain types of digital content, such as infographics and white papers that explain technical features, but in terms of inbound marketing their main goal is not sales generation. For these reasons, digital inbound content could represent interaction source of value as well. Overall, this thesis proposes that digital inbound content can stand in between information and interaction sources of value. Figure 22 illustrates this idea.

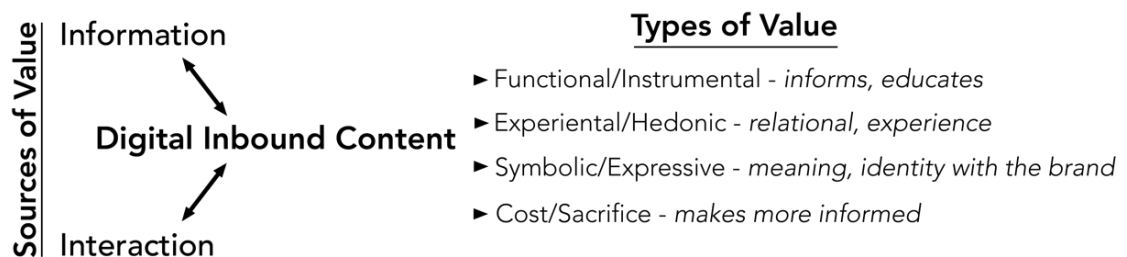


Figure 22. *Digital Inbound Content as a Source of Value.*

According to Smith & Colgate (2007), information as a source of value is concerned with such activities as advertising, public relations, and brand management. It would be fair to note, that digital inbound content is also concerned with the aforementioned activities, apart from advertising in its traditional meaning. Smith & Colgate (2007) also describe interaction as a source of value that is concerned with recruitment, training, services and operations. Nevertheless, today's interaction happens "online" more and more. For example, as was pointed out, 56% of the purchases in B2B are completed online before the first meeting with the salesperson (Roland Berger, 2016). For these reasons, digital inbound content could be seen as a useful instrument for interaction.

Figure 22 also demonstrates types of value that could be provided by digital inbound content. As was described by Smith & Colgate (2007), functional/Instrumental type of value in general is concerned with product characteristics. Digital inbound content in this case can provide better customer experience, informing customer not only about the product, but also about the company's industry. In addition, as inbound approach is con-

cerned with establishing pleasant relationships with customers, inbound ways of interaction, through for example blogs, can give a company more insights on how to make their product or service better. Experiential/Hedonic type of value is concerned with creating sensory, emotional, social, and epistemic experiences (Smith & Colgate, 2007). As was highlighted in previous sections, inbound approach is tightly concerned with these experiences.

Furthermore, Symbolic/ Expressive type of value focuses on self-identity, personal meaning, self-expression, social and conditional meaning (Smith & Colgate, 2007). Based on the information related to digital inbound content and inbound marketing, it was pointed out that inbound approach is also focused on creating strong brand identity and brand awareness, using content for achieving these. Cost/Sacrifice type of value is concerned with economic, psychological, personal costs and also risks involved in the purchase (Smith & Colgate, 2007). Digital inbound content can help customers to evaluate many options available in the industry and also make them more informed, consequently reducing risk probabilities throughout the purchasing process. Table 6 gives an overview of digital inbound content as a source of value in comparison with information and interactions based on Smith & Colgate (2007).

Table 6. *Digital Inbound Content as a Source of Value.*

	Types of value			
Sources of Value	<i>Functional/ Instrumental</i>	<i>Experiential/ Hedonic</i>	<i>Symbolic/ Expressive</i>	<i>Cost/ Sacrifice</i>
<i>General</i>	<ul style="list-style-type: none"> • Correct Attributes; • Appropriate Performances/outcomes 	<ul style="list-style-type: none"> • Sensory • Emotional • Social/Relational • Epistemic 	<ul style="list-style-type: none"> • Self-identity/worth • Personal meaning • Self-expression • Social meaning • Conditional meaning 	<ul style="list-style-type: none"> • Economic • Psychological • Personal Investment • Risk
<i>Information</i>	<p>Informs, educates, helps to realize performance and outcomes</p>	<p>Copy and creativity can enhance sensory, emotional, epistemic experiences</p>	<p>Helps to find identity with the product; interpret meaning; make associations</p>	<p>Helps evaluate alternatives, faster less stressful decisions</p>
<i>Interaction</i>	<p>Sales, service interactions provide or enhance desired outcomes</p>	<p>Service attributes create sensory, emotional, relational, and epistemic experiences</p>	<p>Systems interaction helps customers to feel better about themselves; equity policies can enhance sociocultural meaning</p>	<p>Interactions reduce economic, psychological costs and risks</p>
<i>Digital Inbound Content</i>	<ul style="list-style-type: none"> • Informs • Educates 	<p>Customer-oriented approach, pleasant experiences in digital platforms</p>	<p>Inbound marketing increases brand awareness</p>	<p>Makes customers more informed and less stressful</p>

The table above does not provide a complete information on sources and types of value outlined by Smith & Colgate (2007). More detailed information can be found in the Appendix 1. Table 6 intends to demonstrate that digital inbound content as a source of value shares some similarities with information and interaction types. It also shows how the creation of customer value is affected by digitalization, as interaction between a company and a customer happens more and more in digital form.

It is possible to clarify the concept of digital inbound content as a source of value even more. The Customer Value Creation Framework by Smith & Colgate (2007) described five different sources of value. However, due to the fact that the study was published in 2007, the framework did not take into consideration the dimension of digital interaction which is an inevitable reality of today's company-customer relationships. For this reason, this thesis proposes that digital inbound content can be presented as a source of value that is more applicable in digital realm. Furthermore, digital inbound content being a source of value can do both, to showcase the value potential of the company's offering and to be presented as a value itself. For example, the content that represents the value itself in a case when a company produces educational materials are free of cost. Figure 23 demonstrates the idea of digital inbound content dual value perspective.

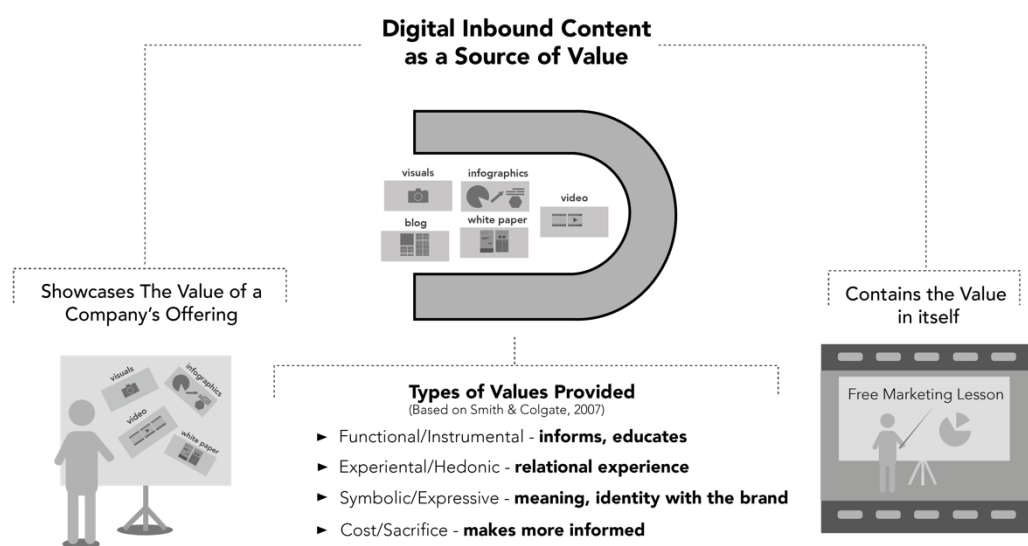


Figure 23. *Digital Inbound Content as a Source of Value Dual Perspective.*

The figure above shows two examples in which digital inbound content used as a tool to showcase the value of a company's offering and the situation when a digital inbound content represents the value itself. The picture on the left in Figure 23 illustrates a company manager showcasing the value of the company's offering with the help of digital inbound content. The picture from the right in Figure 23 shows an example of a free marketing lesson video, which demonstrates that the content itself represents the value.

In addition, as discussed, digital inbound content provides certain value types based on Smith & Colgate (2007).

Referring back to the framework introduced in Figure 17, it was proposed that digital inbound content can be used as a main tool for content marketing. Figure 24 complements the framework of digital inbound content as a marketing tool (Figure 17) with the concept of digital inbound content being a source of value in content marketing strategy.

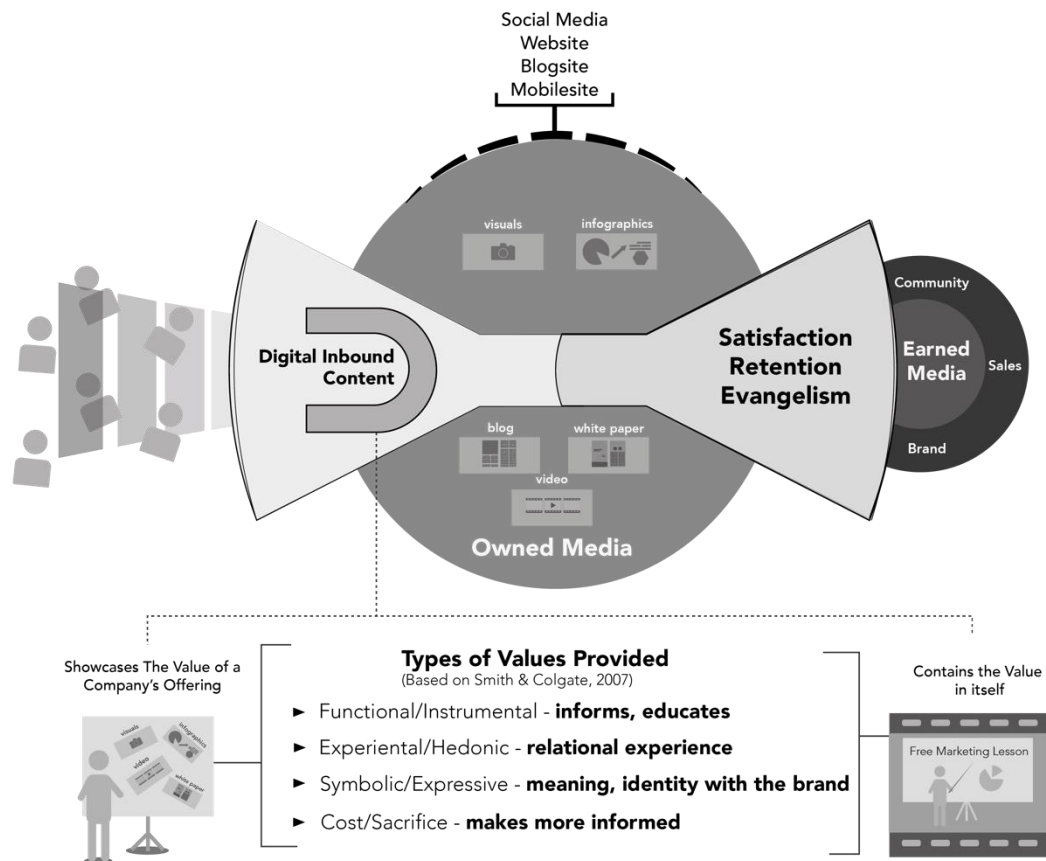


Figure 24. Digital Inbound Content as a Source of Value in a Content Marketing Strategy.

To conclude, Figure 24 combines the aforementioned concepts of digital inbound content as a marketing tool and customer value in a framework of digital inbound content as a source of value in a content marketing strategy. The idea of the framework is to show that a company can create digital inbound content that is published in the company's owned media and then the content is used to showcase the value of the company's offering and also the content represents the value itself. In addition, the framework in Figure 24 proposes that in the times of digitalization, another source of customer value should be concerned with Internet-based interaction and this thesis proposes that digital inbound content represents this type of a component.

4.4 The Use of Digital Inbound Content for a Start-up

This section describes a start-up company and its characteristics. There are several reasons to discuss a start-up in the context of this thesis. First, start-up companies might not have enough resources for a traditional advertising campaigns and therefore cost-effective digital marketing might be effective for them. Second, start-up companies also need to build a network of customers, suppliers, partners, and investors. As inbound marketing focuses on building pleasant relationships, it might also suit start-up's brand-related marketing communication. Finally, the use of modern digital marketing methodologies can be justified with the fact that start-ups bring innovations to the market.

Furthermore, the term start-up itself is not widely used in literature sources and for this reason the amount of information related to start-up companies specifically is scarce. Nevertheless, it is possible to get the information about start-ups by looking at another related subjects. For example, Darnihamedani et al. (2018) uses the term innovative entrepreneurship. In addition, Sorenson & Stuart (2008) give information that the research on entrepreneurship has increased since 1990 due to the fact that small companies are striving large scale of employment rate and economic growth. Another possible way to get information on start-ups is to review the literature on spinoffs. For example, Klepper (2009) provides an extensive review and synthesis on spinoffs, and Capone et al. (2019) study the behaviour of spinoffs in different industries. In addition, the term new venture can be considered as the most popular among researchers to describe start-ups. Klotz et al. (2014) give an extensive overview on new venture teams and literature synthesis on this subject. This thesis will mostly focus on literature available on start-ups, innovative entrepreneurship, and new ventures. Figure 25 simply depicts the terms relevant to a start-up.

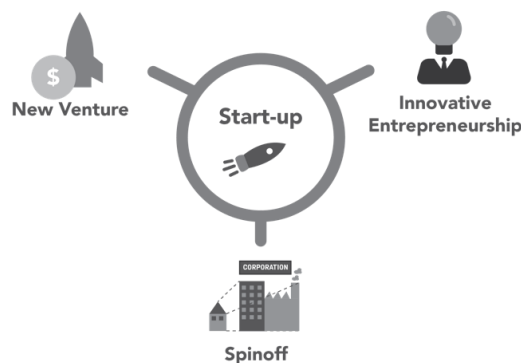


Figure 25. *Start-up Related Terms.*

The figure above shows the terms that could be related to a start-up are new venture, innovative entrepreneurship, and spinoff. As was pointed out, definitions of the term start-

up are not widely available in the research literature and, for this reason, in this thesis, the definitions of new venture and entrepreneurship will be taken into account as well. Blank (2010, cited in Colombo & Piva, 2008) defines start-up as a small company, or temporary organization, created for the reason to explore scalable business models. Klotz et al. (2014) defines new venture as a company on its early stages of development, in which the development is concerned with forming organizational processes, bringing initial products or services to the market, and creating initial customer base.

Innovative entrepreneurship, in its turn, has tight connections with replicative entrepreneurship (Mayhew et al., 2012) and innovative entrepreneur is someone who creates new products or services or develops new methods for their creation and delivery with lower costs (Baumol et al., 2007). Spinoff is the term that is somewhat different from others. According to Shekhar (2018), spinoff is a company formed from employees that leaved their previous firm, which is called parent firm in this case.

This thesis will use the term start-up more often for narrative purposes, but references to other terms will be provided as well. Based on the literature, this thesis will attribute three main characteristics to a start-up company. These characteristics are start-up team, start-up resources and innovativeness. Figure 26 illustrates these characteristics.

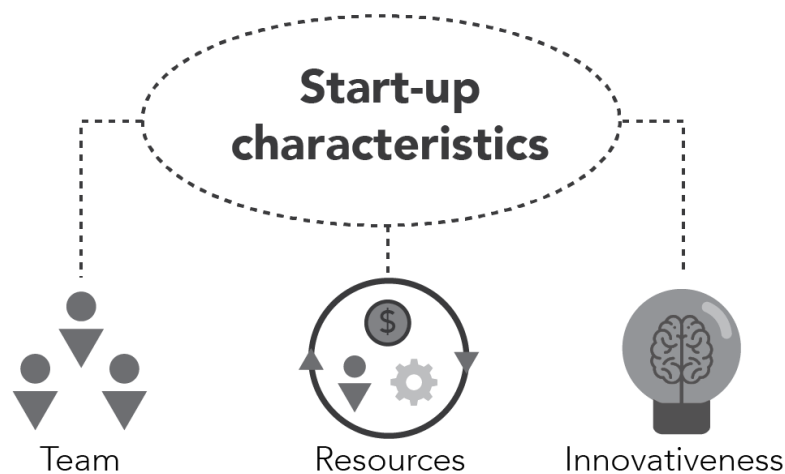


Figure 26. *Start-up characteristics.*

First, start-up teams can be seen as the most widely described characteristic by existing literature. Start-up teams are also called new venture teams or NVT (Klotz et al., 2014) and in some works these teams are referred as top management teams or TMT (Amason et al., 2006). Carland & Carland (2012) claim that new venture teams have a strong impact on the performance and success of a start-up. Klotz et al. (2014) provide an extensive literature synthesis on new venture teams. In this research new venture team is referred to a group of people responsible for the new venture's operations and strategic

decision making. The outcome of the research conducted by Klotz et al. (2014) is an NVT Input-Mediators-Outcome Framework. This framework is shown in Figure 27.

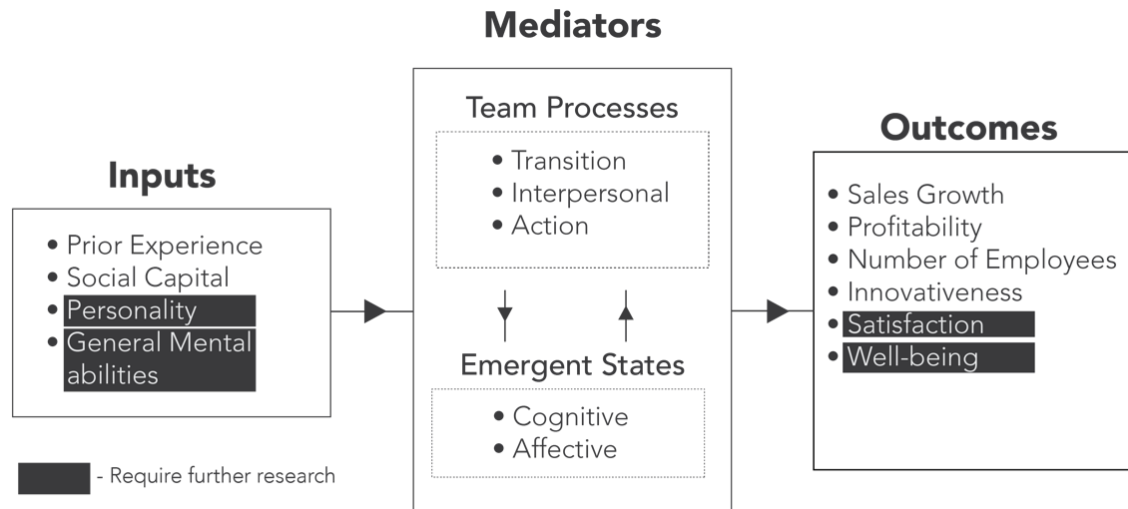


Figure 27. New Venture Team Input-Mediators-Outcome Framework (Klotz et al., 2014).

The framework in the figure above is a short version and more detailed framework can be found in Appendix 2. The input characteristics consider the prerequisites NVTs' members have that affect future NVT performance. First, prior experiences refer to education, specialization, functional background, prior community background and prior success (Amason et al., 2006; Lester et al., 2006; Beckman, 2006; Nelson, 2006, cited in Klotz et al., 2014). According to Klotz et al. (2014), literature does not provide straightforward answer whether shared prior experience of founders provide better results. Second, social capital refers to the extent of networking the founders bring to the new venture. In general, Klotz et al. (2014) claim that ventures with extensive network achieve greater performance. Finally, other inputs considered by the framework are personality and general mental abilities and, according to Klotz et al. (2014), further research is required regarding these subjects.

The mediators in Figure 27 are the connectors between inputs and outputs that affect the new venture performance. Mediators are divided in two groups which are team processes and emergent states. Team processes are activities of the NVT that allow to convert available resources into meaningful results (LePine et al., 2008, cited in Klotz et al., 2014). Emergent state stands for more cognitive and affective occasion processed by NVT (Marks et al., 2001, cited in Klotz et al., 2014). Finally, outcomes in Figure 27 show how effective an NVT is. In general, outcomes refer to firm's profitability, sales, number of employees and the impact of innovativeness in relation to the speed of the new product introduced to the market. Satisfaction and well-being are considered as emerging outcome indicators due to the fact that, for example, in high-tech start-ups

rapid growth is expected, which might require skillful and experienced personnel with certain well-being requirements (Klotz et al., 2014).

Another important start-up characteristic considered by this thesis is the start-up's resources. It is important to note that there is no direct research related to start-up resources, and this question has not been studied as extensively as, for example, the teams. However, literature in general provides information that start-ups are lacking different kind of resources. For example, Wymer & Regan (2005) claim that start-up companies, due to their small size, are lacking resources, both tangible and intangible. Amason et al. (2006) claim that new ventures have experienced competitors and suppliers, sceptical customers and the amount of resources is scarce. Moreover, ventures that are highly novel and do not have previously mentioned references have to "learn by doing".

Aspelund et al. (2005) in their study on technology-based start-ups' initial resources, determined that the higher the degree of technology radicalness, greater team size, heterogeneity, and background experience of the team can positively impact long-term survival of a start-up. In addition, Darnihamedani et al. (2018) study the relationships between start-up costs and innovativeness and claim that high costs of the start-up have positive relationships on innovative entrepreneurship. Overall, it is possible to say that many start-ups are lacking different kind of resources, whether it is expertise, human or financial resources, and availability of this resources may impact long-term survival of a start-up.

Finally, the last characteristic of a start-up selected in this thesis is innovativeness. As was mentioned in previous paragraphs, innovativeness is correlated to both the resources and the team. First of all, literature suggests that start-ups in general play an important role in innovation (Colombo & Piva, 2008; Davila et al., 2003, cited in Spender, 2017). In addition, Spender et al. (2017) claim that startup companies being force for a progress in open innovation. Amason et al. (2006) discuss that the novelty of the new venture as well as its age might play an important role on its performance.

Hyytinen et al. (2015) study the impact of innovativeness on a start-up survival. According to them, most literature suggests positive relationships between innovation and survival rates, as innovativeness enhances market power, may reduce production costs, and also allows start-ups to be more flexible. Nevertheless, Hyytinen et al. (2015) also suggest that there is a negative correlation between innovativeness and survivability. The authors claim that innovative start-ups have more liabilities, higher risks, and access to external financing is limited. Figure 28 expands Figure 26 with the discussion above.

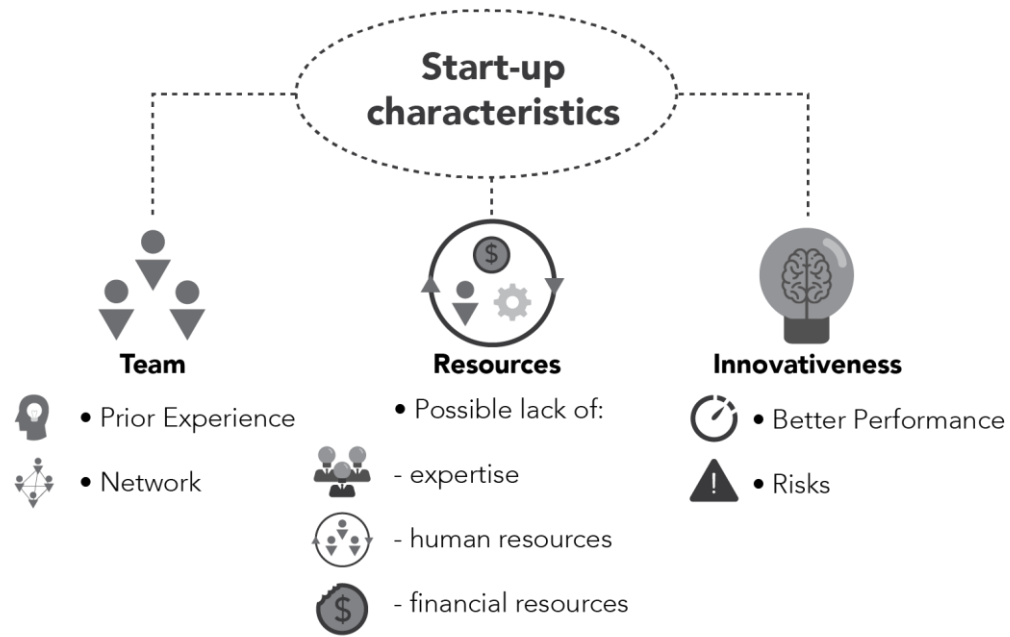


Figure 28. Expanded Start-up Characteristics.

The figure above expands the characteristics of a start-up company introduced in Figure 26 based on the discussions of this section. As Figure 27 shows, prior experience and social network of start-up co-founders are important attributes of the team. In addition, start-ups are often lacking different resources, such as human resources, expertise, and financial resources. Innovativeness is an important characteristic that can enhance the performance of a start-up due to, for example, lower costs. On the other hand, innovativeness might also incur certain risks, such as high liabilities and more complicated process of getting funding.

Previous chapters of this thesis discussed digital marketing, inbound marketing, content marketing and customer value. The framework introduced in the previous section combined the aforementioned concepts to represent digital inbound content as a source of value. This section talks about the characteristics of a start-up and therefore proposes that the framework of digital inbound content as a source of value can be utilized in a start-up company for the following reasons. Start-ups have limited amount of resources to spend on expensive traditional marketing campaigns, undeveloped network (of customers, suppliers, partners, and investors in the industry), and also start-ups are eager to innovate. Figure 29 illustrates the framework of digital inbound content as a source of value for a start-up company.

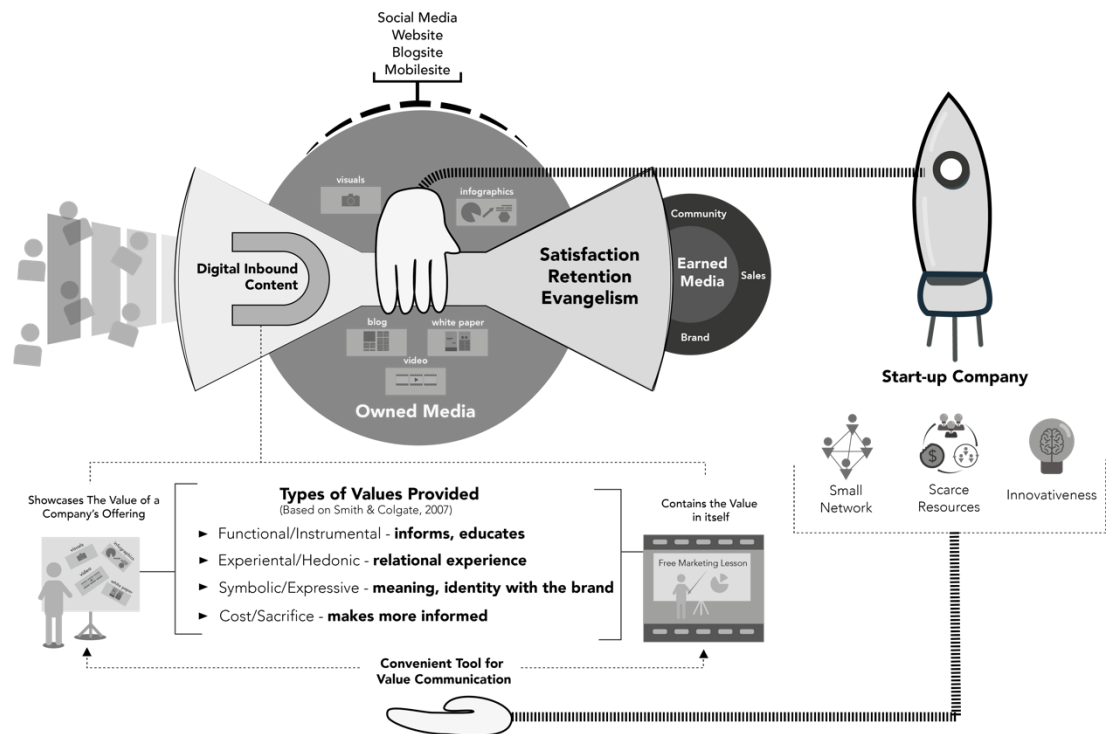


Figure 29. Digital Inbound Content as a Source of Value for a Start-up Company.

Figure 29 combines the aforementioned concepts in a framework of digital inbound content as a source of value for a start-up company. The main idea is that a start-up company can use digital inbound content in its owned media in order to showcase the value they are offering. As discussed, customer value creation framework by Smith & Colgate (2007) proposes seven sources of value and, to achieve the best possible results, the company has to use as many sources of value as possible. Start-up companies, however, are often lacking the resources that would allow them to communicate the value with all the sources. For this reason, digital inbound content and the types of value it provides is proposed to be a cost-effective and beneficial solution in terms of a value scope for a start-up.

First, digital inbound content is informative and educative which provides functional/instrumental value. For a start-up company, it is essential to inform different parties (prospects, partners, investors) about its offering and, more importantly, as start-ups provide innovative solutions to the market, it is often a necessity to educate the audience. Second, digital inbound content provides relational experiences which resolves in experiential/hedonic value. As discussed, start-ups do not have a developed network in the industry, therefore the content that would provide a relational experience will be beneficial. Third, digital inbound content helps to build brand identity which is related to symbolic/expressive type of value. As start-up companies bring innovation to the market, strong brand

identity will benefit in terms of building trust to the start-up company's offering and the start-up company itself. Finally, digital inbound content makes the audience more informed about the company's solution which provides cost/sacrifice value. As discussed, there are a lot of risks involved in start-up activities, not only for the start-up itself, but also for the potential investors, partners, and customers. The content that will provide more information about the start-up's solution might reduce the probability of risks involved.

To conclude, this section discussed start-up companies and presented a framework of digital inbound content as a source of value for a start-up. As described, start-up is a small company created in order to explore scalable business models. In addition, new venture teams, innovative entrepreneurships, and spinoffs are the terms that can be related to a start-up as well. Literature provides information that start-up companies often lacking different kind of resources and have undeveloped industry networks. Furthermore, communication of customer value is the fundamental activity in marketing, though start-up companies might not have enough resources to utilize different sources of value and run expensive traditional marketing campaigns. For these reasons, the framework of digital inbound content as a source of value for a start-up presented in Figure 28 is proposed to be an effective marketing communication tool for a start-up company. Next section discusses the case company which is a start-up operating in the field of electronics hardware testing.

5. THE CASE COMPANY

5.1 The Industry of Electronics Hardware Testing

The case study was conducted in a software start-up company that operates in the domain of electronics hardware testing. The case company was officially established in 2017 by four co-founders in Salo, Finland. Co-founders were former co-workers of Finland's largest cell phone manufacturer and have more than a decade of experience in electronics hardware testing. The case company started their business by offering consultancy services in the domain of electronics hardware testing, which is still the main area for customer operations and source of income. For now, the case company is trying to shift its focus from the consultancy to developing and selling its software product for the reason to scale up its business.

Electronics hardware testing is a niche industry that belongs to the huge and ever-growing industry of electronics production. Within electronics production, hardware testing is used in two stages, during product development and manufacturing. Figure 30 demonstrates this idea.

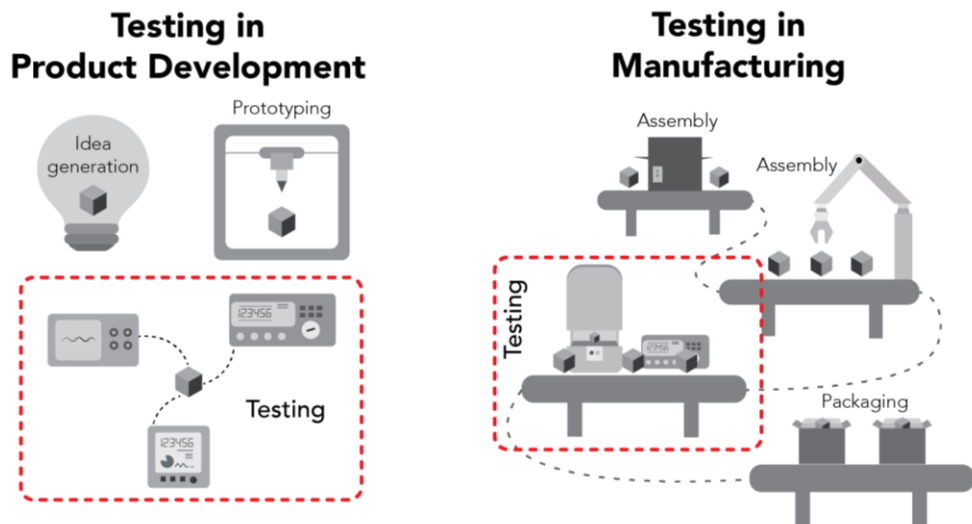


Figure 30. Electronics Hardware Testing in Product Development and Manufacturing.

In the product development stage, the device or a prototype has to be tested and verified in order to determine that it works sufficiently and corresponds to the test and verification requirements. During manufacturing process, electronics devices are tested after their assembly in order to be sure that customers will receive a working device. In addition, in manufacturing electronics hardware test is usually called automated hardware test, as

devices require many different tests at a time and all the process is done in a testing stage of the production line. In some cases, automated hardware test is also used in product development.

Furthermore, the industry of electronics production is highly segmented and have many different players. It is possible to outline some particular stakeholders that are related to electronics hardware testing. These stakeholders are shown in Figure 31.

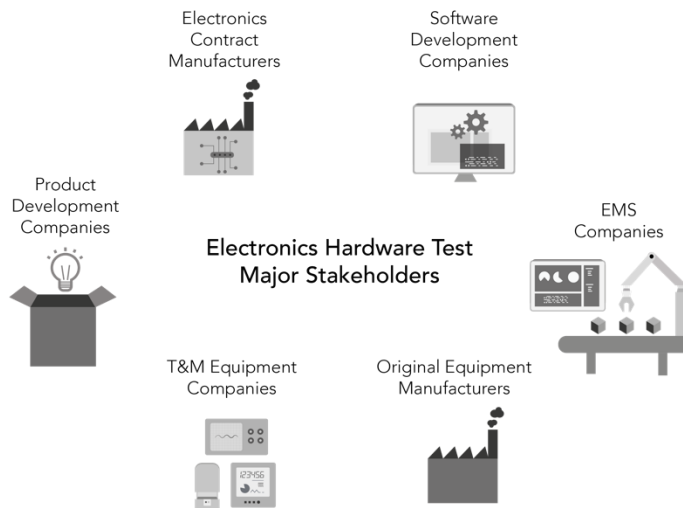


Figure 31. Major Stakeholders of Electronics Hardware Testing.

First, product development companies who mainly need a test during a prototyping stage and later to verify the new device. Second, electronics contract manufacturers are another important player as they provide facilities for product development companies to produce devices in high volumes. It will be important to note that in recent times the concepts of micro factory, rapid prototyping, and adaptive manufacturing have become very popular, and for these reasons, many product development companies have capabilities to manufacture their devices on premises. Examples can be start-up companies producing relatively small volume of IoT devices.

Third, test & measurement companies provide testing equipment for all the listed stakeholders. Fourth, EMS stands for electronic manufacturing services and this is an emerging segment in the Electronics Production which can be seen as an evolution of electronics contract manufacturers. These companies provide an extensive package of services which include designing, manufacturing, testing, distributing, and repairing. Fifth, software development companies provide software packages for different needs such as, for example, CAD (Computer Aided Design) software, MES (Manufacturing Execution System) systems, and also software for electronics hardware testing automation. Finally, original equipment manufacturers (OEM) in terms of electronics hardware testing produce software as well as equipment for different testing purposes.

Furthermore, it is also possible to break down the testing process itself. The main components of electronics hardware testing are the device itself, test and measurement equipment, automated test equipment and a workstation or industrial PC. Figure 32 illustrates all these components.

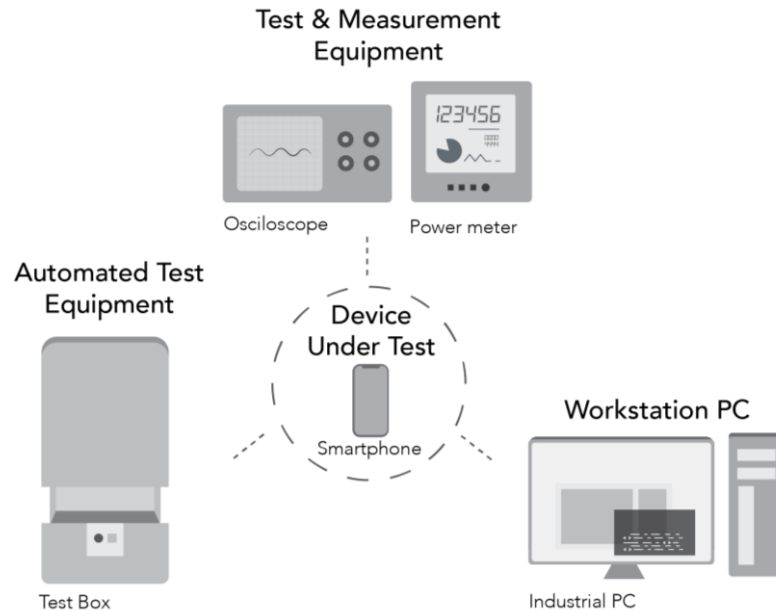


Figure 32. Main Components of Electronics Hardware Testing.

The set-up in the figure above is used both in manufacturing and product development. First, the tested device is usually called the device under test (DUT) or unit under test (UUT). Example of such device can be a smartphone, as shown in Figure 32. Other examples may include IoT devices, smart wearable electronics, car's electronic dashboards, and various wearable healthcare devices.

Second, Test and measurement equipment vary based on the test requirements. Examples of such equipment can be multimeters, power supply, signal generators, and various signal analysers. Third, Automated test equipment (ATE) is a powerful machine that can quickly perform various tests at the same time using automation. ATE can be referred to a test and measurement equipment, but due to the fact of its uniqueness and also taking into consideration the fact that it is not possible to include all kind of test in these machines, ATE can be considered as a separate element of electronics hardware test. In Figure 31, the test box stands as an example of an ATE. Test boxes are commonly used, for example, in cell phones or various smart device tests, in which devices are produced in high volumes and require substantial number of tests. Finally, the workstation is needed to control and connect all the other components of electronics hardware testing. It can be an industrial PC or a single board computer which depends on the requirements.

In addition to the equipment, the software environment is an essential part of automated hardware testing. It is needed in order to automate various test steps and integrate test equipment with the device under test. This software environment can be fully customized based on the test requirements. Companies can build their own software solutions, but in some cases, a company needs a complete automated tester which is called test executive software or hardware test framework. The software for electronics test purposes will be explained more detailed in Chapter 6. Figure 33 explains the idea of software in electronics hardware testing.

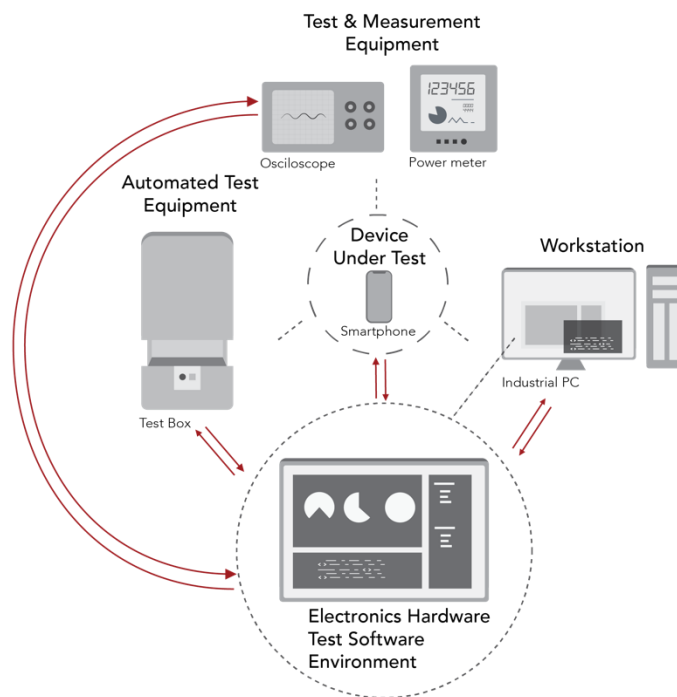


Figure 33. *Software Environment Integrates the Components of Electronics Hardware Testing.*

Tests are usually performed by a hardware test engineer or an R&D engineer, the work of whom in general focuses around setting-up the test system (selecting right test and measurement instruments and settings for them), writing a test code in order to integrate hardware test components, and writing a test code for automation purposes. It is important to note that, several years ago, the main duties of a test engineer revolved mainly around hardware side. However, at a current time, devices are getting more complicated, require different testing equipment and also low-level interaction with the device. This situation then makes the integration process more complicated which is another reason why a software component is essential.

5.2 Software for Electronics Hardware Testing.

Previous section introduced the case company, the industry of electronics hardware testing and briefly described the role of a software component in electronics hardware testing. In this section, software component will be explained in more detail. More specifically, this section showcases different test set-ups (with and without specifically developed test software) and compares the situation when a company develops its own testing software with the situation when the company uses off-the-shelf solution.

In previous section, Figure 33 showed that a testing software plays the role of an “integrator” for the components of the testing environment. Nevertheless, in many cases the integration can be done without specifically dedicated testing software. The idea behind this integration is that the hardware test engineer has to develop a test code that allows DUT’s firmware to interact with the test equipment. Figure 34 explains this idea.

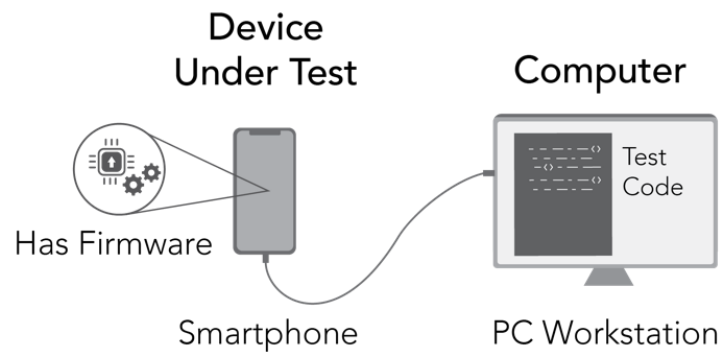


Figure 34. DUT Directly Connected to the Computer.

In addition, the figure above points out that the DUT has a custom firmware. The firmware itself is a term used to describe the software that is already installed on the device which allows to have a low-level control with specific hardware. Moreover, firmware allows to install more complex software environment on top of it. For some simple devices, firmware provides basic standardized operations that user can perform with the device. In Figure 34, smartphone is connected directly, and hardware test engineer writes test code without specifically developed test software. This type of set-up is usually used during product development stage by small companies that make simple electronic devices that need simple tests. However, for manufacturing purposes this process may not be convenient. Figure 35 illustrates the set-up which is more often used in manufacturing.

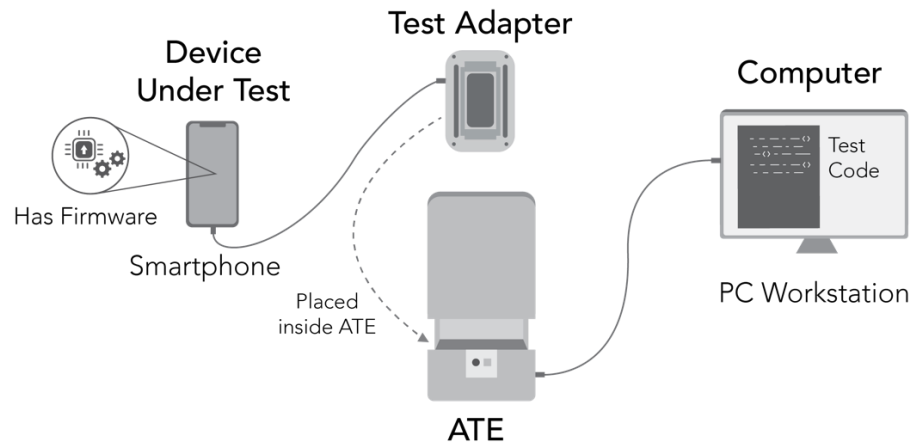


Figure 35. DUT Connected to the Test Adapter.

In the figure above, DUT is connected first to the test adapter which is installed in a test box. The test box then is connected to the computer. Test adapters are special devices developed and configured for one particular DUT. In manufacturing environment, the use of test adapters is more convenient and efficient. In this case the test is already configured, while in the set-up presented in Figure 34 engineer had to configure the test all the time from the beginning. In other words, during manufacturing this set-up allows to test a high volume of devices faster. Figure 36 shows this idea.

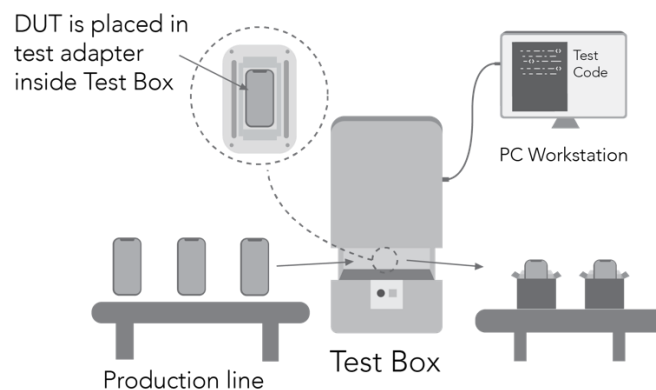


Figure 36. Test Box with Test Adapter in Production Line.

Test box with the test adaptor allows to decrease testing time because of the ability of the test box to perform multiple tests at a time. However, in both Figure 34 and Figure 35, the set-up is done without specifically developed test software environment. In this case, test engineers or R&D engineers have to create their own software algorithm for executing the test. Nowadays this process is becoming more and more complicated, takes a lot of human resources, time and engineering competences in the situation when the device is complex, and automation is required. For these reasons, specifically developed software packages called test executives, or test automation platforms are used. Such software packages allow hardware test engineers to develop more structured test

code, have necessary instruments for automation purposes, and other features that simplify the work. Figure 37 explains the differences between situations when a company has a specifically dedicated software for test and when it does not have it.

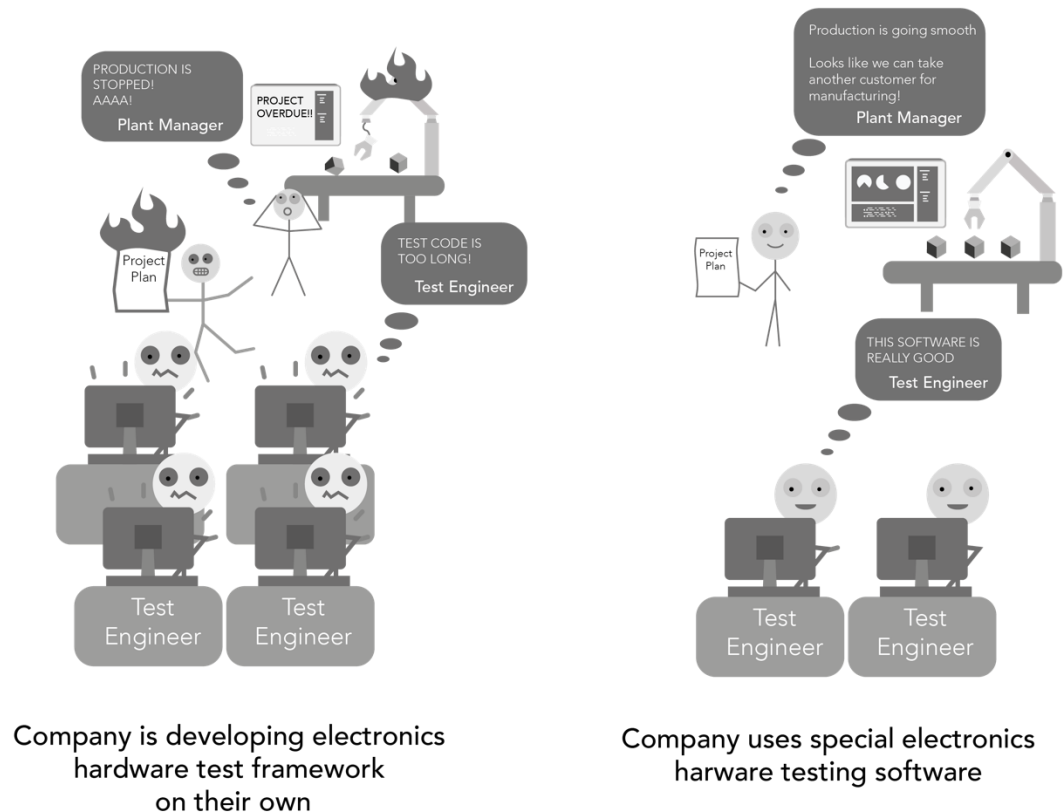


Figure 37. *Developing Own Framework vs Using Special Testing Software.*

The figure above ironically shows how the situation can be different in a company that uses specially developed electronics hardware test platform in comparison with the company where engineers have to develop their own framework. As it is shown in Figure 37, the company on the left have more test engineers, test code is complicated, and the production is delayed. Furthermore, it is important to note that such kind of a situation may occur when company has complex device to test and is planning to produce this device in high volumes.

Overall, this section briefly showcased how testing software is used in different scenarios and why there might be a need for a specifically developed testing software over a “pure” test code. In general, testing software might significantly reduce the complexity of a test code development, especially in cases where production volume is high, and automation is required. This consequently reduces production time, the number of engineers required for execution of the task, and costs for electronics testing overall. The cost struc-

tures and more detailed explanation of electronics hardware testing software will be provided in the next chapter which specifically talks about the case company's software. Next section briefly discusses the case company's business.

5.3 The Case Company and Consultancy Business

As was previously introduced, the case company was established in 2017 in Salo, Finland by four co-founders. The co-founders had previously worked in Finland's largest telecommunication and consumer electronics provider in various engineering and managerial positions. This background and personal connections of some co-founders gave the case company an opportunity to gain customers for company's initial source of income, which was consultancy business. According to company's CEO:

"We have built credibility already during the time working in Finland's largest telecommunications and consumer electronics company. Being on B2B side of things helped us to make connections with leading manufacturing, R&D, and other high-tech companies. This has definitely benefitted our consultancy operations."

Consultancy remained as a stable source of customers and income. From the time the case company established till the time of writing this thesis, the case company has always had customers to consult in the domain of electronics hardware testing. Figure 38 provides information about segments where the case company's consultancy customers operate.

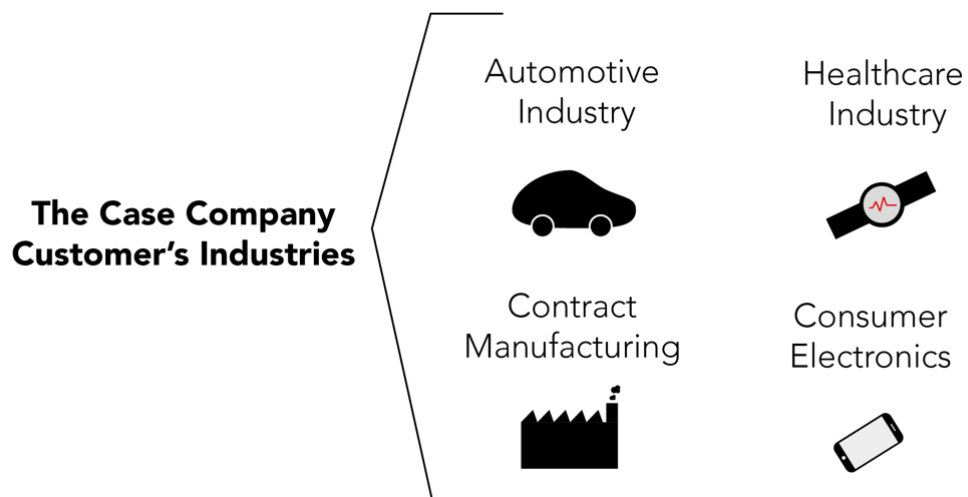


Figure 38. Industries Where the Case Company Customer's Operate.

As the figure above shows, the case company operates with customers from automotive, healthcare, contract manufacturing, and consumer electronics industries. It is important

to note that the case company had several industry leading organizations as their customers, especially in the domain of contract manufacturing and consumer electronics. In addition, many of these customers are located in different countries worldwide. Figure 39 illustrates the locations of some of the case company's customers as well as their industries.

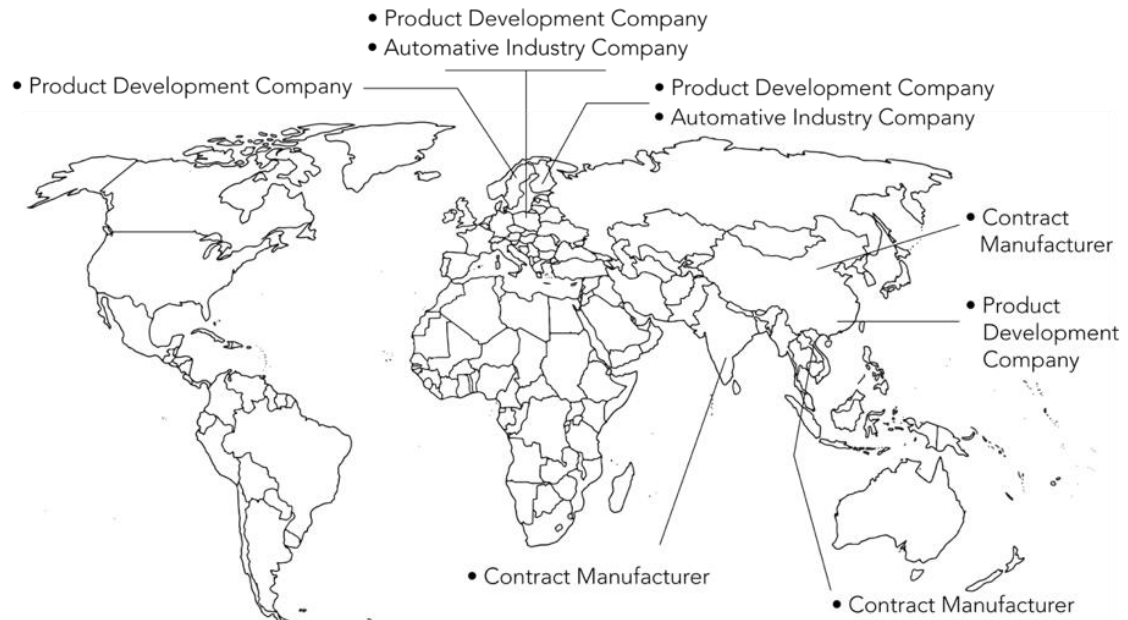


Figure 39. *The Case Company's Worldwide Network of Consultancy Customers.*

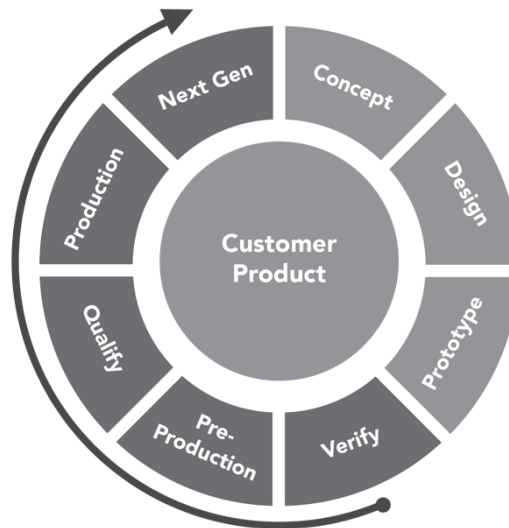
As the figure above shows, the case company has customers from different continents. In China, the case company worked with contract manufacturer and leading product development company. There is also a contract manufacturer in Vietnam and one in India. Furthermore, the case company works with automotive industry and product development companies in Finland, Poland, and Sweden.

Despite the fact that electronics hardware testing is a very niche industry, the competences required to develop and perform the testing are quite extensive and involve knowledge from mechanical engineering, software engineering, electronics and embedded systems engineering, and also different managerial skills. The co-founders of the case company had previous experience in these domains which allowed them to successfully consult their customers. To elaborate on this subject more, Table 7 shows what kind of consultancy services the case company offers.

Table 7. Consultancy Services Offered by the Case Company.

Service Name	Brief Explanations
Design for Test/Production	Designing SW and HW for testing and production purposes
Test Strategies for DUT	Developing right strategy for test automation in manufacturing
ATE Design	Designing the right set of equipment needed for testing purposes as well as integration mechanisms for equipment and DUT
Manufacturing Test Process Optimization	Optimizing the time to test and the test environment itself for the current manufacturing test set-up
Root Cause Analysis	Determining the errors within the existing test process
Hardware Test Development	Developing different types of test (for example, RF test, Display test, functional test), including test strategy and test code

The table above shows only brief explanation of the services case company offers. As Table 7 shows, extensive work is needed not only from the hardware side, but also from software development perspective as well. In addition, consultancy services cover a significant part of the product life cycle from product development standpoint. Figure 40 showcases this idea.

**Figure 40.** The Case Company's Consultancy Services Coverage.

As the figure above shows, the case company consultancy services cover the stages of product development from verifications to the next generation product. These stages

may be tightly concerned with testing of the device. In addition, verification is an important stage because the device cannot be accepted to the production until its capabilities are verified, and safety is guaranteed. Another important obstacle to mention, is that most of the services are tightly concerned with the development of a test code for automation purpose and for the reason to integrate the DUT with the testing equipment.

To conclude, this section discussed the case company's consultancy business, its customers and their industries, and what services the case company offers as a consultancy. Overall, this chapter introduced the case company, the industry of electronics hardware testing and the case company's consultancy business. In addition, it is important to clarify that this chapter is mainly intended to give a brief overview, while the next chapter will provide a more detailed explanation of the case company and electronics hardware testing software. Next section more specifically will discuss the development of the case company being a start-up, and how the co-founders decided to start the development of their own electronics hardware testing software.

6. THE DEVELOPMENT OF THE CASE COMPANY AND ITS MAIN PRODUCT

6.1 The Development of the Case Company in Relation to its Main Product

Previous chapter introduced the case company, the industry of electronics hardware testing and the case company's consultancy business. This chapter is dedicated to the more detailed overview of the case company and its main software product. First section of this chapter is mainly dedicated to a historical background of the case company, which might be important considering the fact that the case company is a start-up. Second section of this chapter describes the value and benefits of electronics products test platform, which is the case company's main product. Finally, third section of this chapter discusses case company's content development and marketing activities.

The intention of this section is to give a more detailed overview of the case company development from its establishment and a brief explanation of the case company's projects. In order to make the narrative more coherent, this section itself is divided on the following parts: background events that influenced the development of own testing software, the launch of the prototype version, further development, and the launch of the pilot version. It is important to note that this section discusses the case company's activities from the historical perspective, rather than technical aspects of the testing software. In addition, this section outlines business and marketing-related projects, which will be explained more detailed further in this chapter. Figure 40 briefly outlines the structure of this section.

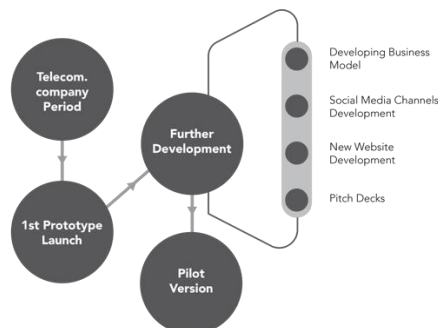


Figure 41. *The Pathway of the Case Company's Development.*

The figure above shows the development process of the case company. There are four main periods shown as big grey circles. First of all, the development of the case company

is tidily concerned with the development of its main product, which is a testing software. As shown in Figure 40, the explanation starts from the time the co-founders were working in Finland's largest telecommunication company. Next, the main event was the launch of the first prototype version of the testing software. Afterwards, the further development period was the longest, and it is also directly related to authors activities in the case company. As seen in Figure 41, this period is also divided on four sections, which are main marketing and business-related activities. Finally, the launch of the pilot version is the case company's main goal that is set in the end of 2019.

The decision to make its own testing software and the start-up itself roots back to the time when the co-founders were employees of Finland's largest telecommunication company. The co-founders worked in the department of manufacturing test engineering, where their duties revolved around a wide spectrum of engineering and managerial activities related to electronics testing. Telecommunication company was highly innovative and produced many different consumer electronics devices in large quantities. For this reason, creating modest systems for R&D test, manufacturing test, and test automation was essential. As was mentioned in the previous chapter, these activities are concerned with the development of a test code. Due to highly automated processes, large variety of electronics devices and different instruments to test these devices, it was inevitable to use specifically dedicated test executive software. In order to make the narrative more coherent, Figure 42 briefly outlines the key events during the Telecommunication company period and transition to First prototype launch.

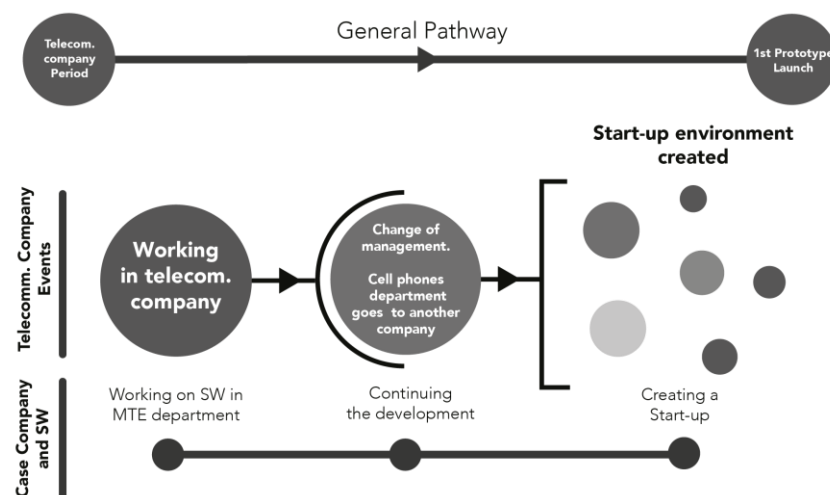


Figure 42. Key Events from Telecommunication Company Period to 1st Prototype Launch.

The figure above is divided on three timelines. The line on the top indicates the general pathway from Figure 41. The timeline beneath it shows the events that happened with

the Finland's telecommunication company and the timeline at the bottom shows the development process of the case company and its testing software.

Going back to the department of manufacturing test engineering of the Finland's telecommunication company, many hardware test engineers used test executive software produced by company in United States. This test executive software is considered an industry standard for testing automation also at the time of writing this thesis. Nevertheless, many companies often develop their own software for testing purposes in a line with using other products, and the co-founders of the case company were working on this software development as well.

Subsequent events are concerned with Finland's largest telecommunication company having tough rivalry in the consumer cell phones market. Furthermore, the telecommunication company changed its top management. All these events extensively impacted the company which led to market shares lose and a huge personnel reduction. Later, the cellphone segment of the telecommunication company deviated to one of the largest IT companies in the United States, and the co-founders of the case company continued to work there.

In order to recover from the consequences of the aforementioned events, Finland's telecommunication company together with the Finnish government decided to create an environment for start-ups. As the co-founders of the case company had already been working on their future software product and had a lot of connections in the industry, creating a start-up seemed like an interesting idea. According to the case company's CEO:

"Creation of a start-up ecosystem was an interesting occasion. We already had our small team, prototype of the software, and many connections in the industry. We decided to give it a try."

The case company created a start-up and started with consultancy operations. Thanks to the connections, the case company was able to get some "big names" in the industry as their customer. In addition, the co-founders were working on their software product and later received a financial grant from governmental organization for its development.

Referring back to the general timeline in Figure 41, the launch of the first software prototype happened in one of Germany's largest electronics manufacturing trade fairs. The case company launched its prototype version together with the producer of Automated Test Equipment from Finland. This was an important strategic move, as the capabilities of the case company's software product were demonstrated in a real case. Based on the words of the case company's CEO:

“The launch of our prototype in Germany was very successful. It clearly showed, that we had to focus more on our software and continue the development further.”

The launch of the first prototype gave a large boost of confidence to co-founders. They continued to work further on the software, meanwhile working on consultancy cases in order to always have tight connections with the industry and generate revenue. Figure 43 shows key events from the first prototype launch, up to the pilot version periods.

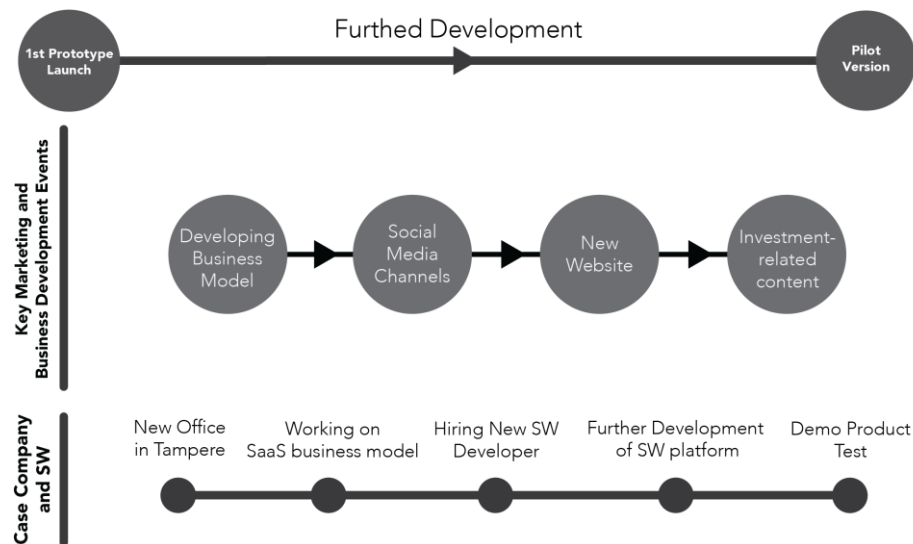


Figure 43. From 1st Prototype Launch to the Pilot Version.

The top line of Figure 43 represents the general pathway from Figure 41. The timeline below shows key marketing and business development events. The line at the bottom shows the development process of the case company and its software product. Sometime later after the launch of the first prototype version, the case company decided to open its office in Tampere, Finland. Before that, the case company had one office in Salo, Finland, where one of the biggest factories of Finland’s telecommunication company was previously located. Besides the point, the building in Salo where the case company had its first office was repurposed to a hub for start-ups focusing in IoT.

When the case company opened its office in Tampere, one of the main goals at that time was the development of a new business model, considering the testing software as a main product. The case company decided to follow the SaaS model, due to the fact of its popularity, profitability and, also, the case company’s software was planned to be developed as a cloud solution, which is one of the preferable attributes for a SaaS model.

Later, when the office was set in, and the case company decided on its business model, the task was to develop social media channels. The case company being an IT company and planning to sell its software product online, the development of the digital presence

was essential. In addition, it was important from the IT start-up culture perspectives. Figure 44 illustrates what were the main goals behind the development of social media channels.



Figure 44. Social Media Channels' Goals.

As Figure 44 indicates, the case company had four main goals for its social media channels which are creating and strengthening the brand, showcasing software capabilities, engaging in a community, and performing activities related to HR. These goals and the creation of social media channels will be explained more detailed in further in this chapter. In addition, as Figure 44 shows, main social media channels were Facebook, Instagram, and LinkedIn.

Next important tasks were to build a new website and start hiring more people. There were several reasons for creating a new website, apart from the fact that the information on the initial case company's website was already outdated. The main goals for creating the new website are illustrated in the Figure 45.

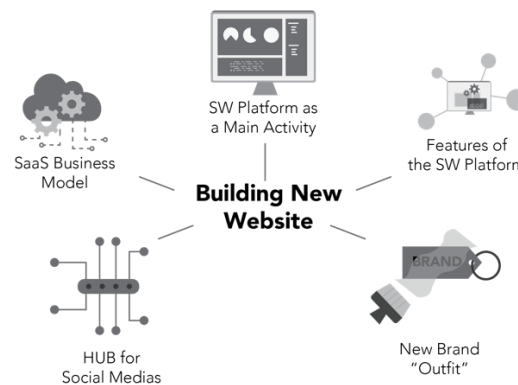


Figure 45. The Goals for Building the New Website.

As Figure 45 illustrates, it is possible to outline five main goals for building the new website. First, the case company has changed its business model to SaaS. Second, the case company shifted its focus towards software platform as a main activity. Third, it was important to show the future feature-set of the new software product. Fourth, the case company has changed its brand "outfit", created new brand slogan and content. Finally, the

website stands as the main hub for other social media. At the same time, the case company started to create an investment-related content, which consisted from pitch-decks, flyers and other graphics. This content was later used in several start-up events the case company participated in.

After previous milestones were completed, the case company fostered its HR-related activities and hired its first senior software engineer. The speed of the case company's software development dramatically increased, and many features were reworked. The software was deployed on different devices, such as single-board computer and industrial computer. In addition, the capabilities of the testing software were verified in the cloud. The development of the testing software is continuing, and the case company is planning to pilot it by the end of 2019.

6.2 Value and Benefits of the Case Company's Testing Software

Previous section gave an overview of the events that happened in the case company, brief overview of its marketing activities, and key projects and events related to the case company's testing software. This section talks about the value of the case company's testing software. First, this section introduces the general case of using a testing software in manufacturing. Second, the main features of the case company's testing software are introduced. Third, this section illustrates costs structures of testing software and testing environment in production overall. Finally, this section talks about what value is provided specifically by the case company's testing software.

To start, it might be important to briefly showcase again the main components of electronics hardware testing and how the test is performed. As explained, the main components of electronics hardware testing (or in other words, the components of test environment) are the device under test (DUT), test and measurement equipment, automated test equipment and industrial PC. A hardware test engineer writes the test code in order to interact with the firmware of the device and synchronize the device with the test equipment. All these operations should be automated and, if the process happens in manufacturing, the test environment should also interact with manufacturing execution system (MES). This MES system, in its turn, can be explained as a software management tool that runs all the processes in manufacturing from assembly to packaging. Figure 46 summarizes the content of this paragraph and shows an example case of testing in manufacturing environment.

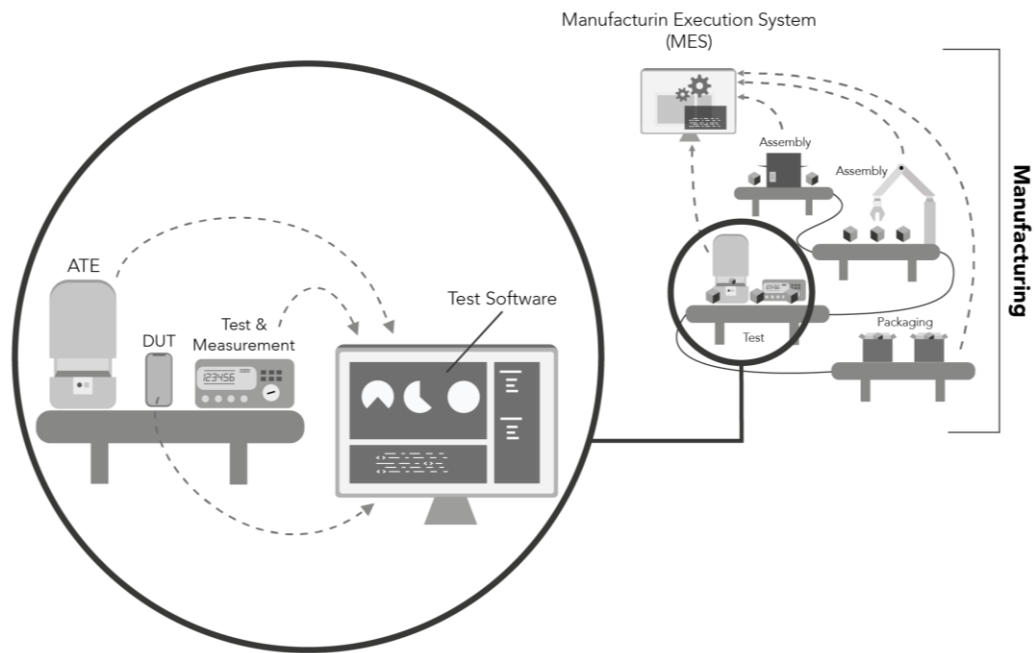


Figure 46. Testing Software in Manufacturing.

The figure above illustrates how test software is used in manufacturing environment. The main components of test, which are ATE, DUT, and test & measurement equipment are controlled by the test software. Test equipment performs systems, functional, radiofrequency and many other tests based on the device and test requirements. The volume of devices and number of tests is high, so for these reasons, the testing process should be automated, and the use of the testing software is inevitable.

To begin the discussion on value provided by the case company's testing software, it is possible to observe the general problems in the electronics hardware testing. Case company addresses four main problem areas in electronics testing process based on industrial experience. These problems are illustrated in Figure 47 below.

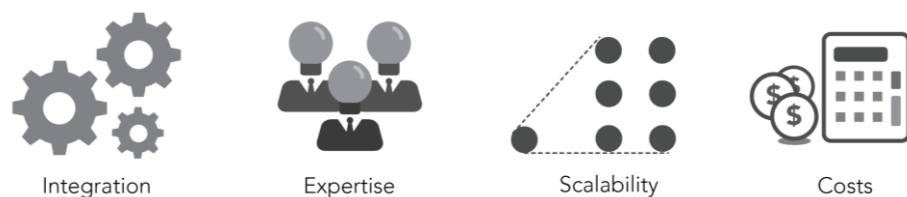


Figure 47. The Main Problems in Electronics Product Testing Addressed by the Case Company.

First, integration problem is concerned with the fact that the test environment components should be integrated and synchronized, which is complicated and time-consuming activity. Second, electronics testing process itself is complicated and require different expertise from the company's personnel. In fact, a company might not have a required expertise and in this case has to look for an external help, which results in lost time and

additional costs. Third, scalability issue occurs when the device moves from product development stage into manufacturing where high volume of devices should be tested. Finally, all previously mentioned issues might incur huge costs.

Due to the fact that the testing software plays an extensive role in test environment, it can significantly impact the situation. The case company is developing testing software with a variety of features. The design and architecture of the software also plays an important role in resolving these issues. Figure 48 illustrates main features and capabilities of the test software developed by case company.

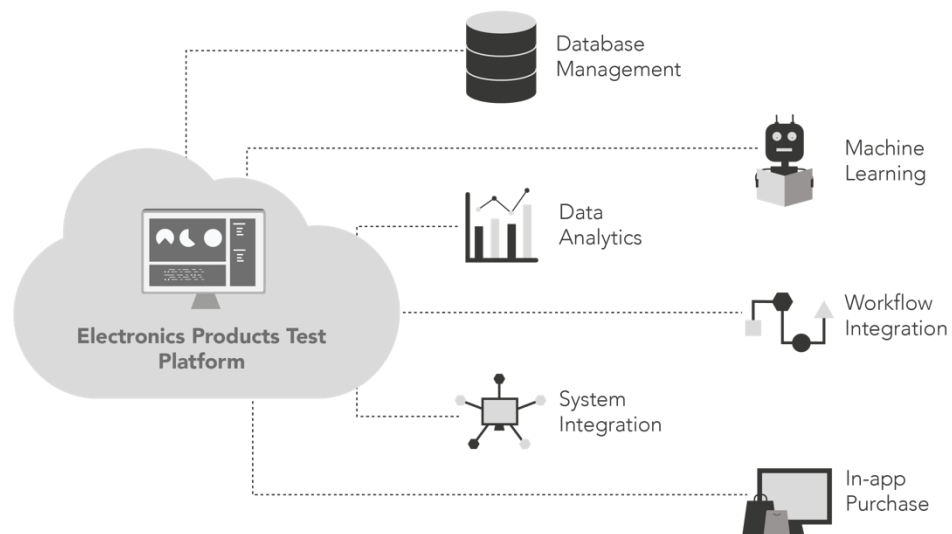


Figure 48. *The Features of Electronic Products Test Platform.*

The case company's testing software is referred as electronics products test platform and this name will be used further in this thesis. The test platform has an extensive set of features and modern software architecture, but the ones shown in Figure 47 can be considered more relevant from marketing and business perspective. First of all, the platform is a cloud software solution, meaning that the data centers of the solution are available through the Internet. More specifically, it allows to develop and run tests from any device that is connected to the server. It also eliminates the need to use industrial PCs and run software from cheaper and smaller single-board computers like Raspberry PI.

This thesis will not explain each feature in detail, but rather describes the benefits and value they provide. First, database management allows to use predeveloped databases of test codes, which makes the test code development process faster. Second, machine learning algorithms and data analytics allow to make the test faster and increase the quality of testing process and test equipment by utilizing predictive maintenance. The predictive maintenance itself as a concept is intended to decrease the costs in compari-

son with traditional preventive maintenance. Third, workflow integration allows to connect electronics product testing platform to MES in manufacturing, which makes the set-up of test environment in manufacturing more convenient. System integration means that the test platform is developed to synchronize the equipment in test environment faster and easier. Finally, the case company wants to implement the feature of in-app purchase. With this feature in-built, for example, companies who produce testing equipment might sell their drivers through the case company's test platform. Driver, in software development, is a special software that allows to interact with the hardware.

In order to continue the discussion on value provided by the case company's test platform it is important to look on to the cost structure of a testing software and test environment overall. First, it was previously mentioned that companies might develop their own testing software or purchase it from another company. The process of developing testing software is complicated and expensive, and companies often face the question whether they should build or buy their testing software. To address this question, it is possible to look onto the cost structure of a testing software over the lifetime of the test environment. This structure is illustrated in Figure 49.

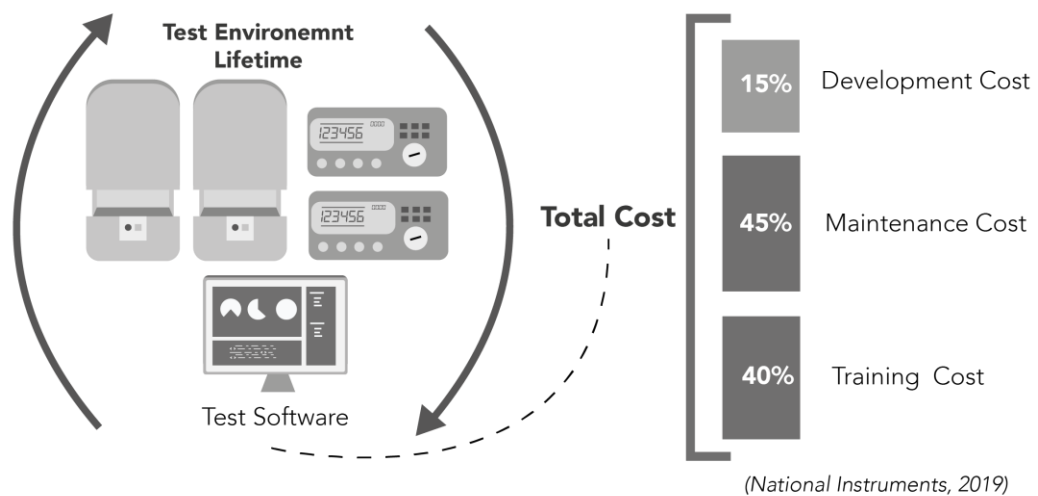


Figure 49. Cost Structure of the Testing Software over the Lifetime of Test Environment (National Instruments, 2019).

The figure above shows a simple representation of how the testing software cost structure usually looks over the lifetime of test environment. First, the development cost is based on the actual time it takes to develop the testing software and it varies based on the complexity of the test environment. In addition, the number of developers affect the time of the development and might also significantly affect the cost. Second, maintenance cost is based on how much time is spent on maintenance in comparison to the development and what is the percentage of yearly maintenance cost. Finally, the training

cost is considered due to the fact that employees need to learn how to use the software. It is based on a course development time, the duration of the course, development of training materials and required settings for the course.

The decision for the company to go for the on-shelf testing software solution most often based on how much it is possible to save on it. In general, currently available market solutions reduce the aforementioned costs. Nevertheless, these software solutions might require significant investments upfront. Furthermore, in case of changes in test environment, available solutions do not provide enough flexibility, due to the restrictions in the software architecture. Figure 50 shows differences in costs, pricing and SW design provided by the test platform that the case company is developing.

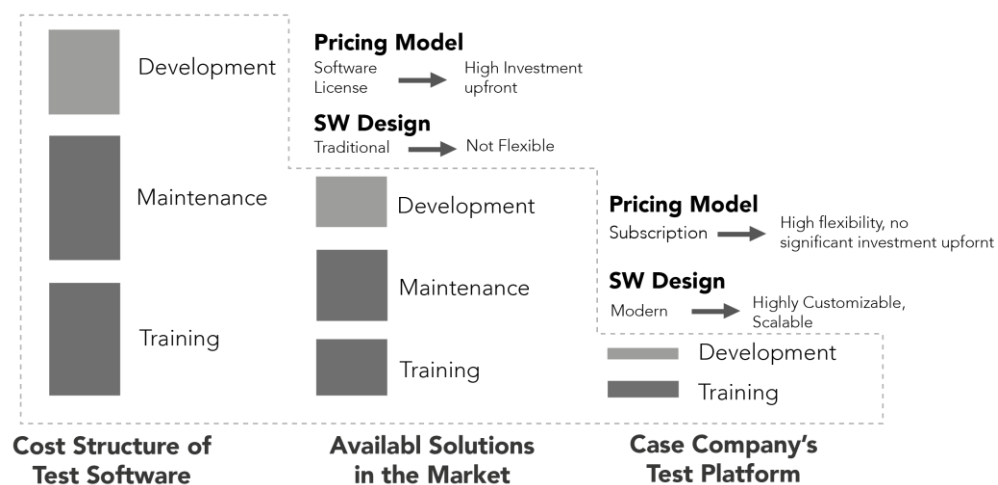


Figure 50. Differences in Software Costs and Benefits Provided by Case Company's Test Platform.

The figure above shows that the case company's test platform is intended to significantly reduce costs in comparison with the scenario in which a company is developing testing software on their own. As seen in Figure 49, development costs are significantly reduced, as features explained above allow to reduce the complexity and time of the test code development. Software maintenance costs can be completely removed due to the fact that solution provided by the case company is a cloud solution. Training costs are also reduced because modern software design allows to reduce the expertise required to use the software and provides better user experience. In addition, modern software architecture makes the case company's test platform highly customizable and scalable for testing large volume of devices. Furthermore, subscription model makes the solution more flexible in terms of cost management, which might be important for certain customers.

Previous paragraphs explained the value provided by the case company's test platform from the perspective of costs accounted only for the testing software. Another factor to

consider is how the case company's test platform might affect the costs related to the whole automated test environment. Figure 51 shows the total cost of ownership of an automated test environment.

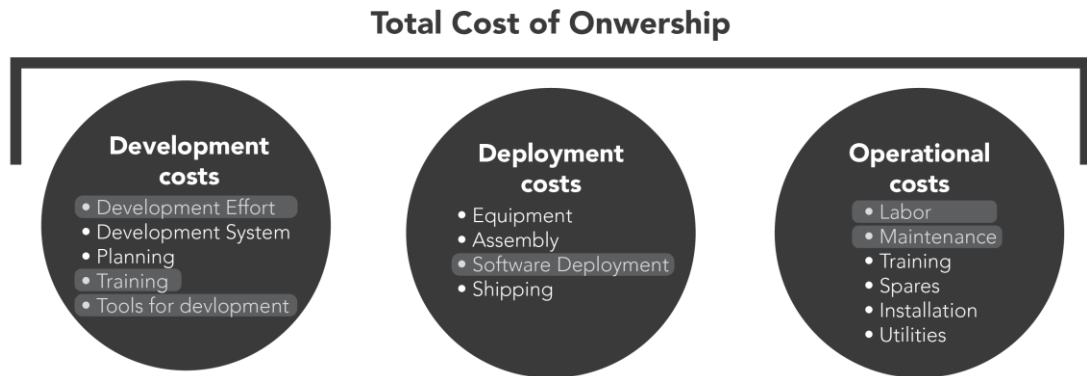


Figure 51. Total Cost of Ownership of an Automated Test Environment (National Instruments, 2019).

Figure 51 shows that the total cost of ownership of an automated test environment consists of development costs, deployment costs and operational costs. Highlighted costs correlate to the software, and for this reason only these costs will be discussed further.

First, the development costs are based on the development effort, training and tools for the development. Development effort, in its turn, is the time needed to build the software and the hardware for the test system. Training includes the time needed to learn the new software development tools as well as the testing equipment. Tools for the development are costs associated with purchasing software licenses of other products needed for the development purposes.

In deployment costs group, there are software deployment costs which are related to the installation of the testing software on testing machines and syncing the test environment together. Software deployment is rather complicated and specifically developed test software can significantly impact the deployment time and effort needed during this process.

Finally, in operational costs group, there are labor and maintenance costs. Labor costs depend on the time it takes for hardware test engineers to work on the test environment, including test code development. Maintenance is needed for both software and testing equipment.

The features of the case company's test platform can positively impact these costs. Development effort and training costs are reduced as test platform allows to significantly reduce the time for development and less expertise is required. Hardware test engineers can develop a test code and automation sequences faster with already available test

codes in databases. This and system integration features allow to significantly reduce software deployment costs. Due to the fact that less expertise is required, the number of personnel and consequently labor costs can also be reduced. Maintenance of the testing software is taken care by the case company, which is a benefit of the cloud solution.

At this stage, it is important to clarify that it is rather difficult to get the exact number of costs reduced. At the time of writing this thesis, the case company developed the core engine of the test platform and verified its capabilities to work on the cloud and a single board computer. The case company has not yet piloted the software, and for this reason the exact information on value provided in monetary terms is not listed here. However, the information on test platform's current and future capabilities and possible value provided can and should be used for marketing and investment-related purposes. Figure 52 summarizes the information on case company's test platform benefits and future value.

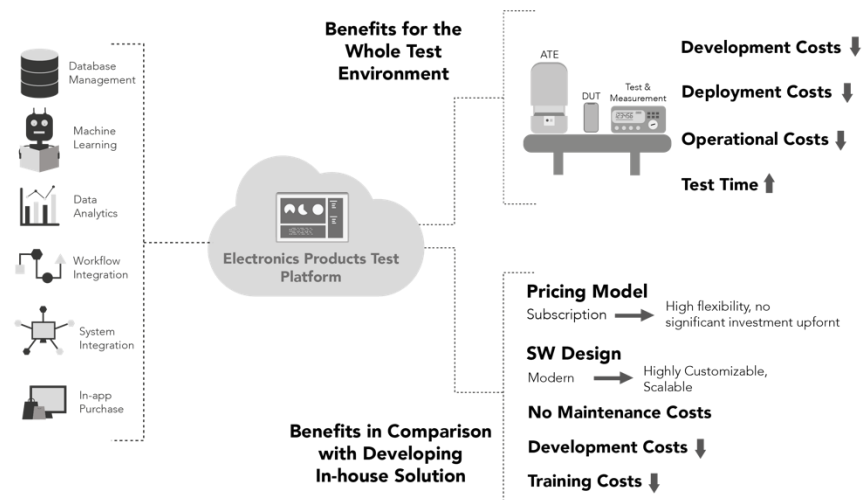


Figure 52. Benefits of the Case Company's Electronics Products Test Platform.

Figure 52 summarizes the content of this section by presenting the infographics of benefits provided by the case company's test platform. The solution that the case company is developing is intended to decrease development and training costs, in comparison with the case if a customer decides to develop its own solution. In addition, software maintenance costs are eliminated. Electronics products test platform is also beneficial for the whole test environment and is intended to reduce development, deployment, and operational costs. The test time will be also decreased, which might make the whole manufacturing process more efficient.

Overall, this section described the benefits and value that the case company's test platform will provide. As was previously noted, it is not possible to give the exact values in monetary terms due to the fact that the test platform is still under development. Never-

theless, demo runs of the test platform have been conducted with positive results. Furthermore, the information briefly described in this section happened to be useful and beneficial in terms of marketing and investment-related activities.

6.3 Content Development and Marketing-Related Activities.

Previous section discussed what benefits and value can be provided by the case company's test platform. This section talks about content development and marketing-related activities of the case company during the time of test platform development. At this stage it is important to clarify two obstacles related to the case company's marketing. First, the case company has not started sales due to the fact that its main product is still under development. Nevertheless, being an early-stage start-up, the case company decided to perform marketing activities. Second, the case company used digital and content marketing. As it was explained in the theoretical background of this thesis, digital marketing techniques are not necessarily related to sales. In general, the reasons to perform marketing-related activities before sales operations are shown in Figure 53.

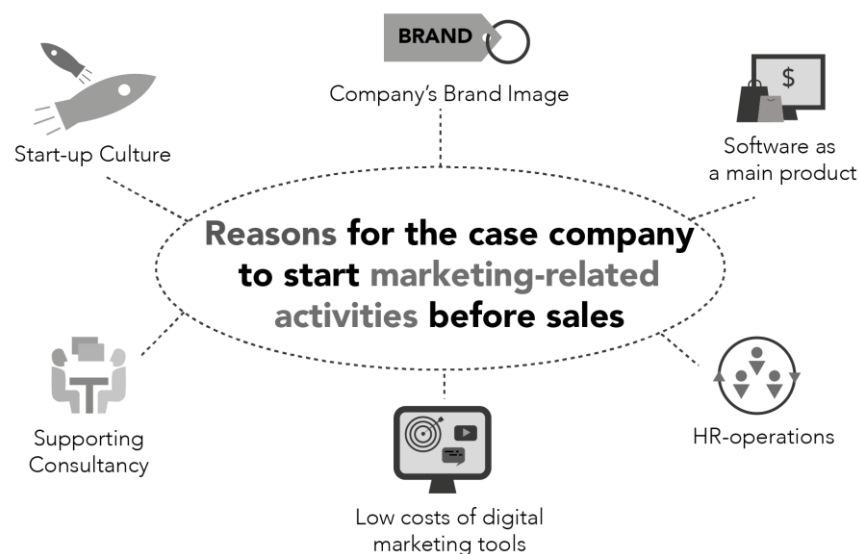


Figure 53. *Reasons for Marketing-Related Activities Before Starting Sales.*

As the figure above illustrates, there are six main reasons why the case company decided to perform marketing-related activities. First, one of the main reasons can be the development of the case company's brand, which affects the company's image in a start-up environment, its HR-related activities and existing consultancy business. Second, as was noted in previous paragraph, the case company uses digital marketing techniques. This allows to perform certain marketing activities (for example, social media marketing) considerably cheaper than with traditional marketing. Third, showcasing the case com-

pany's activities in social media and developing branded content has become an attribute in a start-up culture environment. Fourth, the case company's main product is a software, which is considered to be sold online as the case company is intended to use SaaS business model. Developing marketing content already at this stage can be a part of a future buyer's journey plan. In its turn, buyer's journey can be explained as a digital marketing plan developed by the company, which shows the stages that potential customer has to accomplish in order to purchase a company's product or service. Fifth, digital marketing affects company's HR-operations. In fact, many companies use HR platforms provided by social media where a company can publish vacancies. Finally, digital marketing activities can support already existing consultancy business of the case company.

In previous chapter it was already mentioned that the case company was developing its social media, company-related content, investment-related content and also a new website. First section of this chapter talked about the period of the case company's development between first prototype launch and pilot version. Key events during that time were the development of the new business model, social media, new website, and investment-related content. Figure 54 depicts these events and marketing content developed at that time and the narrative of this section will follow this figure.

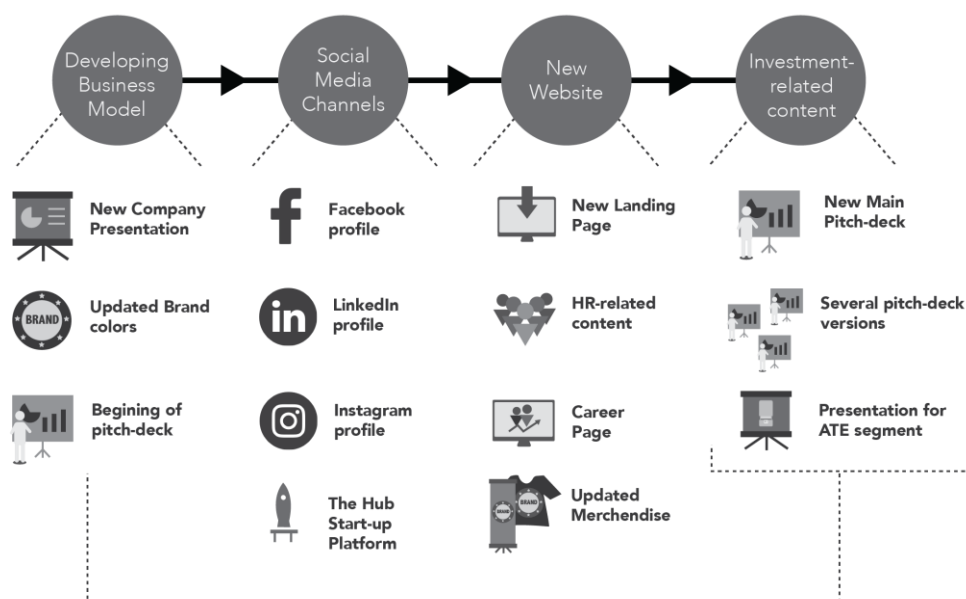


Figure 54. *The Case Company's Content and Marketing Projects.*

In Figure 53 it is possible to see that the case company has started to work on its pitch deck during business model development period and continued to work on it throughout the whole timeline. The reason to represent it in the following way revolves around the fact that the pitch deck was used as a guideline for creating other content types. With

the development of the pitch deck, all the other content and media sources were consequently updated. Figure 54 demonstrates this idea more explicitly.

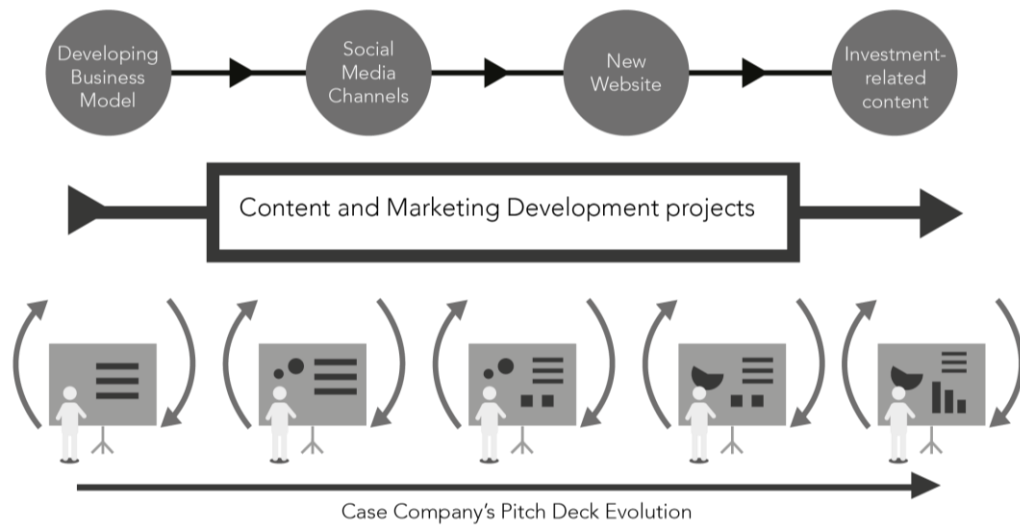


Figure 55. Information Exchange Between the Case Company's Pitch Deck and Other Content and Marketing Projects.

The figure above represents how the information was exchanged between the case company's pitch deck and other content and marketing projects. It is important to note that the exchange occurred from both sides, meaning that the content and marketing projects also affected the pitch-deck. The reason for this type of informational exchange revolves around the fact that the pitch deck included all the important information about the case company, from business model to go-to-market strategy and product description. Furthermore, the information presented in the pitch-deck was standardized with the case company's branded visuals, which will be explained later.

Coming back to the timeline of Figure 54, it is shown that the case company started with new company presentation. This presentation was intended to be used for consultancy clients, potential customers, and other parties that have relationships with the case company. In this presentation the layout and colors were changed and new color for the logo was used. The case company also updated some of the content on the existing website based on this presentation and all the upcoming slides were also standardized based on the layout of this presentation. In fact, most of the graphics and also written case company's content was standardized afterwards. According to the case company's CEO:

"Standardizing company's content from the beginning was a good idea, especially for a start-up. Knowing that we always have standard content keeps consistent image of the company and makes the process of making any kind of graphical material way faster."

At this time, the case company also started to work with business accelerator company. With a manager from the accelerator company, the case company started to build its first version of the pitch deck using existing company's presentation as a support. In addition, the foundation for future digital marketing operations was built.

One of the priorities for the case company in terms of its digital marketing operations was the development of its social media. As Figure 54 shows, the case company created its profiles in Facebook, LinkedIn, and Instagram, being the most popular social medias. Facebook and LinkedIn also provide an extensive set of features for HR. Another social media where company created its profile was The Hub, which is a Finland's popular start-up platform. It was previously explained that one of the goals for building a new website was the usage of it as a hub for social media. This idea is illustrated again more explicitly in Figure 56.

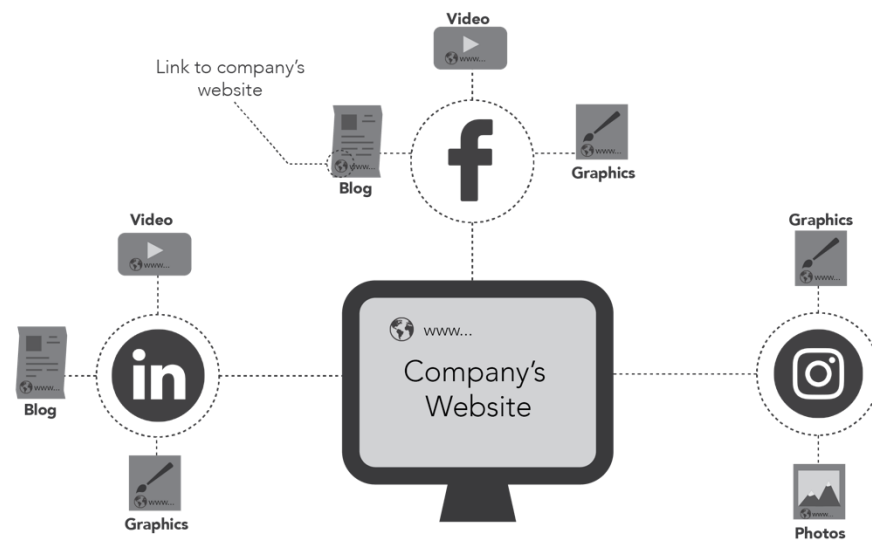


Figure 56. *The Case Company's Website as a Hub for Social Media.*

The practice of the hub for a content is widely used in digital marketing and the same strategy was implemented by the case company. As Figure 56 shows, company had three different social media and different types of content used in these media. The content that the case company used was mostly graphics, pictures, and small blog posts. With these contents the case company showed some of its internal activities, achievements, HR-related content, and information about the events where the case company participated. Furthermore, the case company is planning to make several videos to showcase the capabilities of the test platform.

Figure 56 also shows that each type of content's icon has a small sign of a website. This is the concept of a hub, which works in a way that any content posted on social media has a weblink to the company's main website. This consequently generates more traffic

to the website and shows that visitors are more interested in the company, which is an important goal at the stage when the case company does not have its product.

After social media profiles were developed, the case company started to build its new website (see Figure 45). The case company previously had its website, but the information was outdated and difficult to understand. The development of the new website started from a new landing page. As was previously explained, the case company used its pitch-deck as a back-up informational source for creating additional content. For the new website, the case company created a new slogan that appeared on the top, which stands as the case company's mission. In addition, the distinction between software and consultancy businesses was clearer in comparison with the previous website. The case company also described software and its capabilities in a more simplified form. Another important attribute were logos of the case company's customers. Figure 57 illustrates main content of case company's new website.

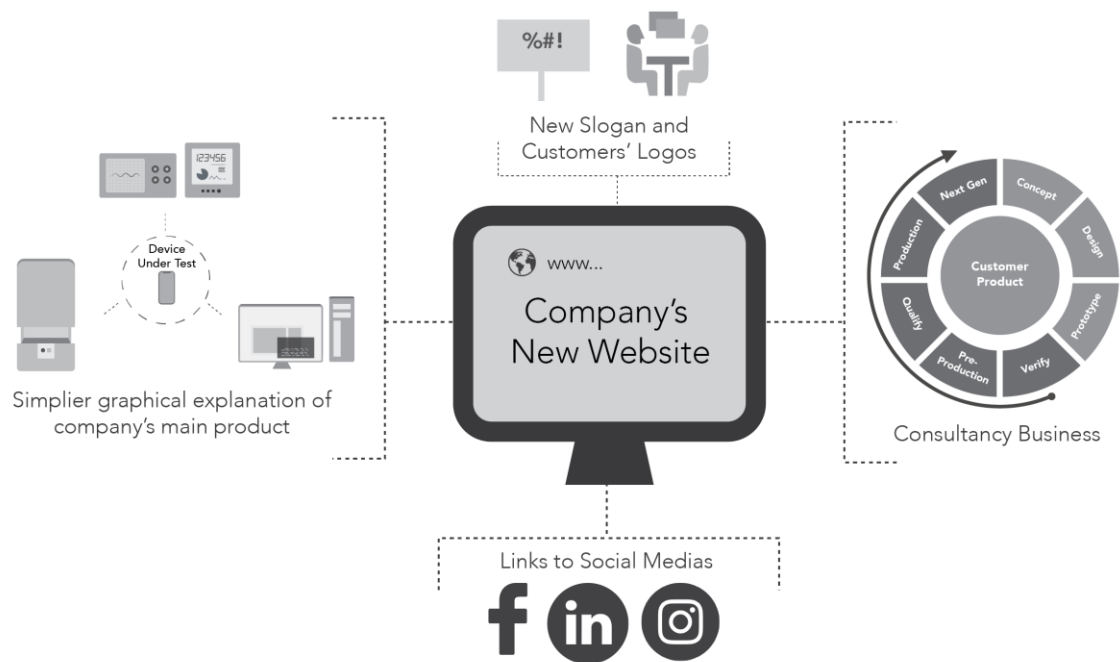


Figure 57. Main Content of the Case Company's New Website

Figure 57 shows that one of the case company's goals in terms of its new website was to explain the case company's business in a simpler form. Another goal was to positively affect company's HR-related activities. Based on company's CEO:

"We got a feedback that our previous website was complicated, especially for the people outside the industry. With the new website we tried to solve this problem. In addition, a website is a first place where potential employees go".

At the same time of making the new website, the case company started HR-related activities. The case company created employees' profiles, using standardized graphics and distributed them within social media and in a physical form. To foster this process, the case company created a career page on its website, in which potential employees can check information on available positions and also send open applications. During that time, the case company also updated its merchandise with new branded clothes, stickers and a roll-up to strengthen the company's brand presence.

Finally, when the test platform development progressed, the case company focused more on its pitch-deck. The case company created several versions of the pitch-deck which included long, short, and stage versions. In addition, different versions of the pitch-deck were required for different events and different investors. Based on the content of the pitch deck, the case company created email flyers intended to send for investors.

There are several marketing and networking projects that were not included in the general timeline of Figure 54. These projects are not related to the case company's software, but more to showcase the case company itself in local communities and strengthen its brand. The case company sponsored one of Tampere largest live speech event, where it had an opportunity to use its previously developed merchandise. In addition, the company participated in several pitching events organized by local business and governmental authorities. Later the case company participated in Tampere largest start-up festival as a finalist of the pitching competition.

One of the main goals of this section was to showcase that the case company used digital and content marketing and what benefits it brought to the case company. As was already discussed, the case company used these technics when the main product was not yet developed. At this stage it is important to mention that the case company initially set its priority to digital marketing and also to inbound marketing and inbound ways of doing business. Furthermore, it is possible to say that the case company has not yet undertaken high-scale digital marketing operations to measure its outcomes, due to the fact that the main product is still not developed and the information about its value and market is not clear. However, it is still possible to see some benefits of digital, content, and inbound marketing for the case company. These benefits are illustrated in Figure 57.



Figure 58. Benefits of Marketing Technics the Case Company Used.

First, digital and content marketing are cheaper marketing solution. Second, as was precisely noted, with the help content marketing methodology, the case company standardized its content. Third, the case company created a brand image of itself in a local start-up community with the use of digital and content marketing. Fourth, inbound marketing methodology helped to create relationships with partners and start-up community. In fact, the case company was already contacted many times by potential customers and partners, without the case company pushing the information to reach these parties. Fifth, digital, content and inbound marketing will play an important role for creating the community for the case company. This community is important for supporting the case company's software product both from the technical side and as a word-of-mouth. Finally, it is possible to conclude that these marketing methodologies and benefits provided by them will lay a foundation for future sales operations.

To conclude, this section discussed the case company's content and marketing projects. The main areas for projects were the development of the new business model, creation of social media channels, the development of the new website, and the creation of the investment-related content (Figure, 54). In addition, the focus of this section was also to describe why the case company decided to start marketing activities before the main product is ready for sales. These reasons are the development of the case company's brand image, the development of the base for future software sales, HR-related activities, support for the existing consultancy business, the engagement the local start-up culture, and low-costs of digital marketing tools (Figure 52).

7. DISCUSSION AND LESSONS LEARNED

7.1 Overview of the Problem and Framework

Digital technology has already impacted and will have even greater value in the development of marketing strategies (Kannan, 2017). Many corporations pointed out that the development of “digital relationships” with customers soon will become a necessity (Phillips, 2015). In fact, according to McMaster (2010), Internet has become an initial source of information for many customers. Digital marketing has created new customer experiences and, consequently, new processes to provide the value to the customer (Kannan, 2017).

Traditional marketing techniques such as cold calls or paid TV-commercial has become less successful (Halligan & Shah, 2014). In this new reality, digital marketing methodology gaining more popularity and achieving more commercial success is inbound marketing (An, 2018). Internet has made this methodology very popular and also cost-effective due to the fact that distribution channels in most cases are free of costs (Hawlk, 2018). Inbound marketing has different tools in comparison with traditional or outbound marketing. Traditional marketing is sometimes called an interruption-based marketing (Rancati et al., 2014) and utilizes such tools as TV, radio, print, outdoor, direct mail or banners. Inbound marketing, on contrary, can be described as a methodology that is about getting found by potential customers through various digital content marketing techniques such as blogs, webpages, whitepapers, search engine optimization (SEO), social media marketing, and eNewsletters. One problem though can be the fact that research literature in this domain is scarce and most information on inbound marketing is available on the web and blogosphere.

Inbound marketing can be also presented as a combination of search engine marketing, social media marketing and content marketing (Chaffey & Smith, 2013). Content marketing, in its turn, has received more attention in comparison with the other digital marketing methodologies and research on it has increased in recent years (Rancati et al., 2015; Keyes, 2006; Holliman & Rowley, 2014; Casas, 2016). However, there is still no comprehensive theoretical framework on content marketing (Zahra & Noruzi, 2018, Wang et al., 2017). Content marketing can be defined as an inbound marketing technique that is intended for achieving and sustaining a company’s brand status with an effective value-added content distributed via social media and other digital channels (Holliman & Rowley, 2014).

The channels for distributing the content can be also presented as media. Leib et al. (2012) divides content on three main categories as paid, owned, and earned media. The combination of these three media is called converged media. The content distributed through these media is referred as digital content and can be defined as a value-added service or mobile service distributed through wireless network (Koiso-Kanttila, 2004). The most popular types of digital content are pictures, videos, animations, e-books, whitepapers, podcasts, webinars, infographics, blog texts and social media posts (Chaffey & Smith, 2013; Järvinen & Taiminen, 2016).

Furthermore, creating and communicating customer value is one of the most important tasks in marketing (Kumar & Reinartz, 2016). Smith & Colgate (2007) introduced customer value creation framework, which encompasses five different sources of value and four main types of value. As forms of interaction between a company and a customer are changing with digital technology, this thesis proposes a concept of digital inbound content as a new source of value based on Smith & Colgate (2007) customer value creation framework. Following this concept, digital inbound content can be used as a tool to communicate the value to a customer and there is a value in the content itself.

In addition, this thesis suggests that digital inbound content as well as inbound and content marketing technics can be successfully utilized by a start-up company, due to its limited resources, potentially small social capital and aspiration to innovation. Figure 59 shows the final theoretical framework of this thesis and how it was constructed.

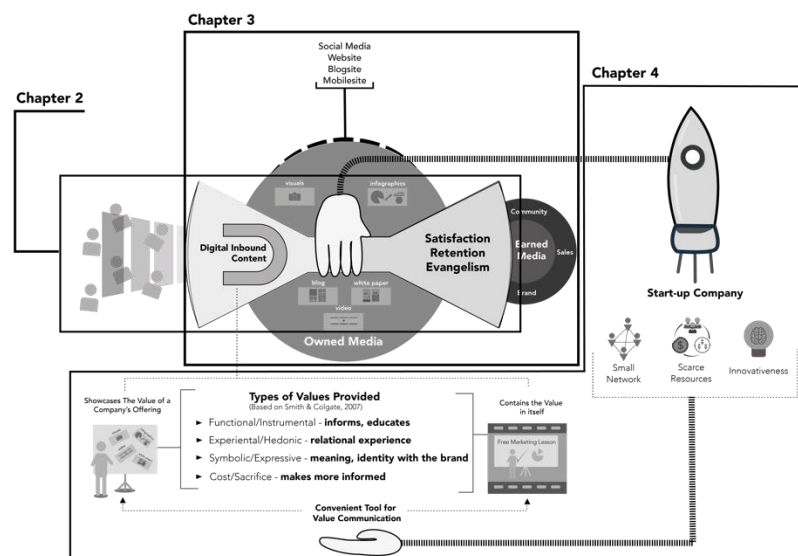


Figure 59. Main Theoretical Framework of This Thesis.

To conclude, this thesis proposes that digital inbound content can be used as a source of value for a start-up company's marketing strategy. More specifically, digital inbound

content communicates the value to a customer and represents the value itself, for example in a case if a company provides educational material for free. Digital inbound content informs, educates, provides relational experience to the customer and helps to communicate company's brand identity. Due to low costs of distribution and orientation on building relationships with the customers and also the community, the usage of digital inbound content and in general inbound and content marketing techniques can be justified for a start-up company. The main reasons for this are the characteristics of start-up companies to have limited amount of resources, the need to develop a network in the industry, and their aspiration towards innovation.

7.2 Reflection of the case in the Framework

This section discusses the application of the main theoretical framework of this thesis in the case company. This thesis addresses the case a software start-up company operating in a field of electronics hardware testing. This section also describes the development process of the case company's digital content in relation to the main theoretical framework of this thesis. Results that the case company has achieved by utilizing this framework are discussed in the next section.

As described, the case company is a software start-up on its early stage that operates in the field of electronics hardware testing. In addition, the case company is still developing its main product and has not started sales operations and for this reason it is not possible to evaluate "full performance" of theoretical framework. However, the developed approach and insights from digital, inbound, and content marketing has positively impacted the case company and, in general, the framework illustrated in Figure 59 can be fully reflected in the case.

The case company had clear reasons for developing its marketing operations before starting sales. These reasons are developing the case company's brand image, supporting existing consultancy business, impacting HR-related activities, emerging in the local start-up community, and building initial base for sales of the main product which is a software testing platform. The case company also decided from the beginning that its marketing activities will revolve around digital and inbound marketing. First goal was the development of owned media. Furthermore, being an early stage start-up, it was important to develop its initial branded content. These processes are outlined in Figure 60.

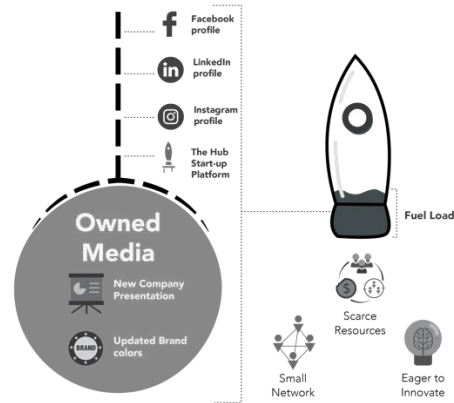


Figure 60. Development of Owned Media and Branded Content.

Figure 60 illustrates that initial goals of the case company was the development of owned media and new brand-related content. Previous chapter discussed that the case company standardized its content, which helped its further development. In addition, standardizing the content is widely used in content marketing. Furthermore, Figure 60 showed that the case company is a start-up on its early stage, which is conceptually represented with the amount of fuel loaded in the rocket.

Next important step for the development of the case company's owned media was a creation of the new website which will serve as a future hub for social media. When it was created, the case company started to post its first content. Figure 61 illustrates this process.

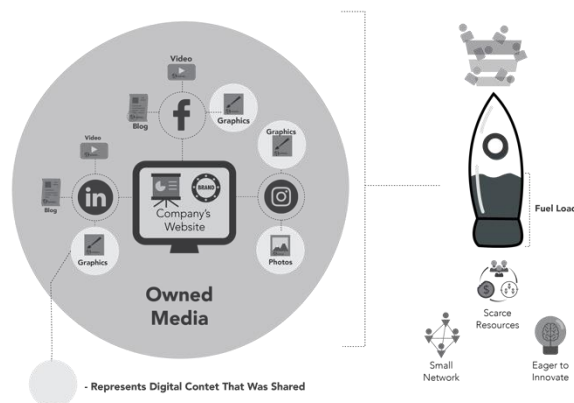


Figure 61. Development of the Case Company's Website and Sharing of the Content.

Figure 61 shows further development of the case company's owned media with an addition of the new website. As was previously noted, website works as a hub for other media and the goal is to generate website traffic, or in other words, website visitors. With an addition of the new website, the case company has shared some content on its media. This content is highlighted with white circles in Figure 61. Most of the shared content are

different types of graphics and the case company also set the goal to prepare blog texts and working on videos related to electronics hardware test platform.

Next goal was to develop a pitch deck and prepare investment-related content. At the same time, the case company was extensively working on its electronics hardware test platform and got a lot of insights regarding the platforms' performance. These insights served as important sources for the development of the pitch deck. The pitch deck, in its turn, served as a source for other presentations and graphical content made by the case company. Figure 62 shows the connections between insights related to the electronics hardware test platform, customer value, and digital content created for the communication of the platform's value.

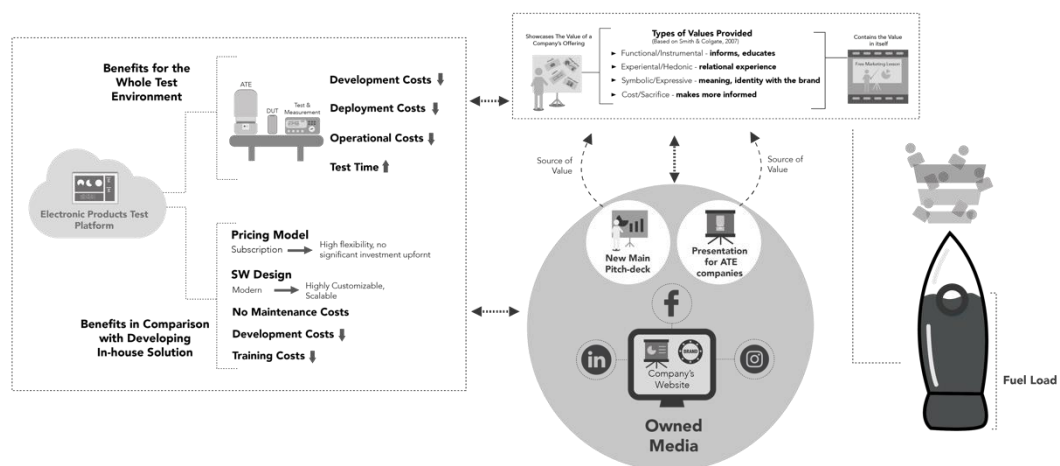


Figure 62. The Case Company's Digital Inbound Content Works as a Source of Value.

Figure 62 shows how digital inbound content created by the case company works as a source of value as proposed in general theoretical framework on Figure 59. Previous chapter also discussed the case company's electronics hardware test platform and the value it provides. Furthermore, the case company was able to use insights regarding the value provided by electronics hardware test platform to create digital inbound content. This content was used in the case company's pitch deck and from the pitch deck onwards, other digital content types were created and distributed in the case company's social media and website.

Finally, the case company participated in several events, which allowed to generate earned media. The case company took part in several pitching events organized for local start-ups and sponsored one of city's largest public speech event. One of the major events was the city's largest start-up festival where the case company participated as a finalist of the pitching competition. Finally, Figure 63 integrates how all the aforementioned case company's activities and achievements as well as theoretical concepts discussed in this thesis are reflected in the main theoretical framework.

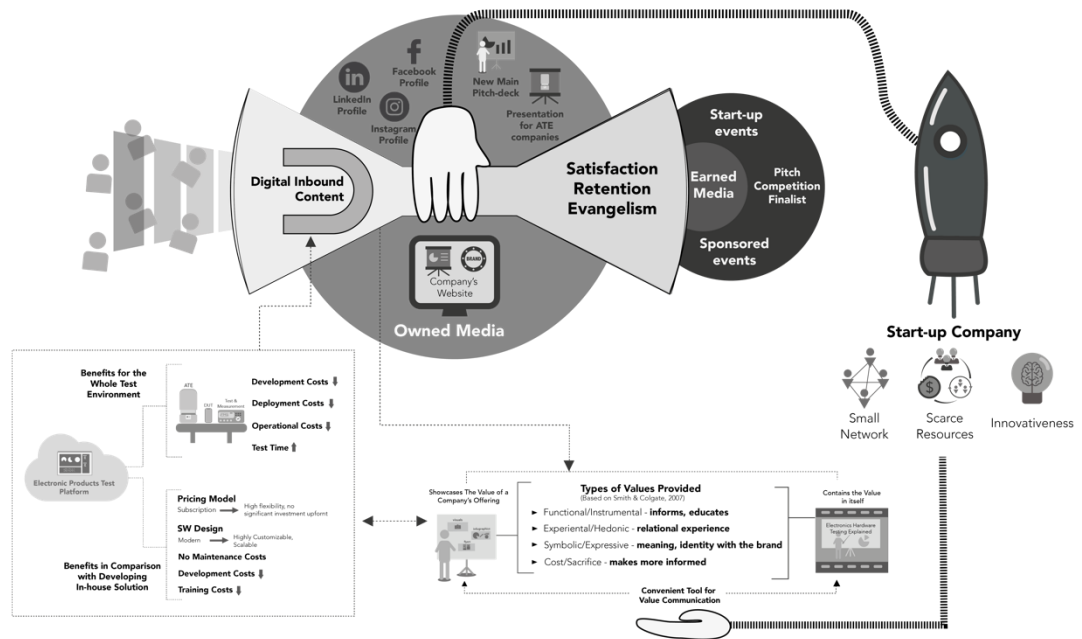


Figure 63. Reflection of the Case in the Main Theoretical Framework.

To conclude, the case company is a software start-up operating in the field of electronics hardware testing. The main product of the case company is electronics hardware test platform, which is a software that allows hardware test engineers to develop programming code for testing electronics devices and automation. The case company's test platform is capable of reducing costs of electronics testing and overall makes this process more efficient. For the case company being an early stage start-up, it is important to develop the network in the industry, showcase its presence and innovativeness, and also develop its brand image. Limited resources of start-ups often do not allow to invest in expensive marketing campaigns and, for these reasons, digital inbound and content can be utilized to communicate the value provided by a company's offering. Moreover, digital inbound content contains the value in itself. In this case, digital inbound content in forms of visuals and infographics was used to communicate the value that the case company provides with its electronics hardware test platform. In addition, the case company is also planning to create digital inbound content in forms of a blog text and video for educational purposes, therefore creating a content that will represent the value in itself.

7.3 Analysis of the Results

Empirical study of this thesis introduced the framework of digital inbound content as a source of value for a start-up company. General idea of the framework is to use the concept of digital inbound content that would showcase the value of a company's offering and contains the value in itself. The application of the framework is intended for a start-up company, due to the fact that start-ups have limited amount of resources and need to

develop network of partners and potential customers. Application of the framework to the case company, which is a start-up that operates in a field of electronics hardware testing, has shown positive results. Moreover, the concepts of inbound and content marketing played an important role in building the case company's certain business and organizational operations. Figure 64 shows the main results achieved with the help of the framework and concepts that constitute this framework.

- Development of the Case Company's Owned Media
- Development of the Case Company's Branded Content and Standardization
- The effect of inbound and content marketing on constructing the value proposition
- Framework as a guideline for the creation and distribution of digital inbound content

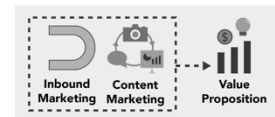


Figure 64. Main Results Achieved with the Framework and Theoretical Concepts.

First, one of the main achievements of the case company was the development of its owned media which consists of the social media profiles and the new website. During the development process, the case company kept in mind the hub model, in which the visitors travel from social media to the website. The development of the new website itself was an important milestone. The case company has already started to spread the content in its owned media and the developed structure will suit as a foundation for more intensive marketing operations in the future. Figure 65 summarizes the content of the case company's owned media.

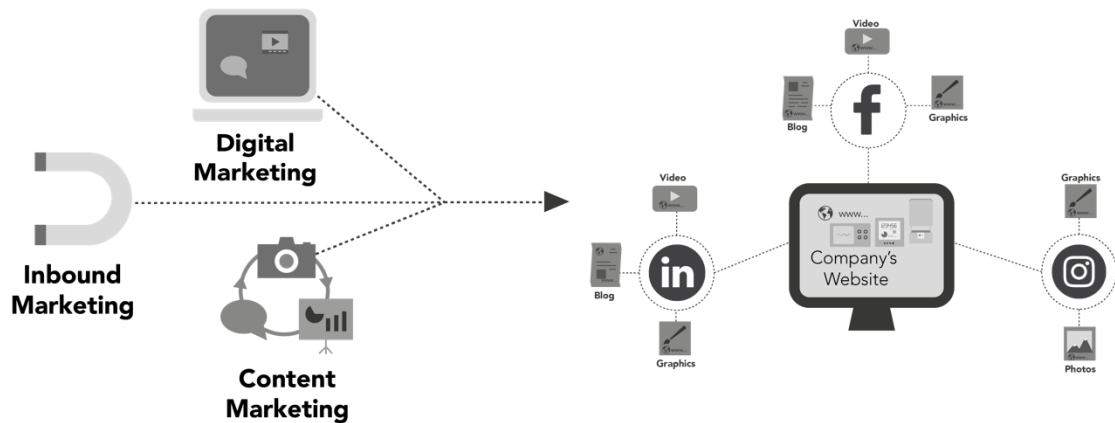


Figure 65. *Creating Owned Media with Digital, Inbound, and Content Marketing.*

Second, the concepts from the main framework of this thesis helped the case company develop its branded content and, most importantly, standardized the development the content in general. The main sources for further content development are the company's presentation, pitch deck, and the website. The content is standardized between these three domains and then works as a source for other content types that can be used either for social media, the case company's branded content, and the content for the case company's internal operations. In addition, standardization allows to keep the content consistent and deliver brand message more efficiently. In general, it is possible to highlight that insights from the main framework very positively affected the case company's brand image and helped to push it further in the community. Figure 66 shows the processes of the content standardization and distribution.

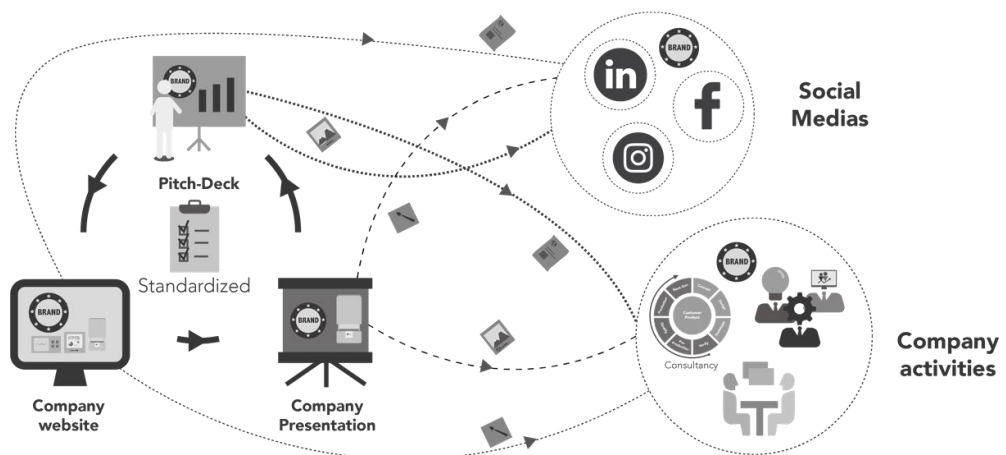


Figure 66. *Content Standardization and Distributions*

Third, inbound and content marketing highly affected the construction and communication of the value provided by the case company's main product, and also the explanation of the case company's activities. As mentioned, the case company is a start-up in its early stage which operates in the industry of electronics hardware testing. The product

that the case company is developing is highly specific and can be fully understood mainly by the people who resides in this industry. In certain cases, it is rather difficult to communicate the message that the case company delivers with its future product. In this case, inbound marketing mindset helped to transfer the message. This is demonstrated in Figure 67.

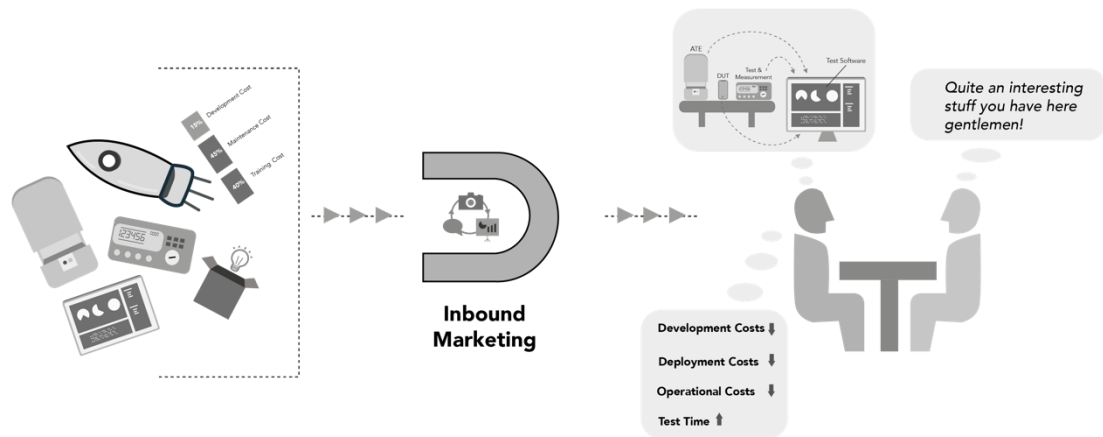


Figure 67. Better Communication with Inbound Marketing.

Finally, the theoretical framework presented by this thesis can suit as a guideline for the case company's marketing operation, content creation and construction of the value proposition. This is especially useful due to the fact that the case company is a start-up in its early stage. Start-up companies very often do not have developed internal and external business operations. Literature has also pointed out that start-ups on their early stages have to "learn by doing" and do not have possibility to learn from competitors, suppliers and customers (Amason et al., 2006). The idea of the framework as a guideline for the case company's marketing operations is illustrated in Figure 68.

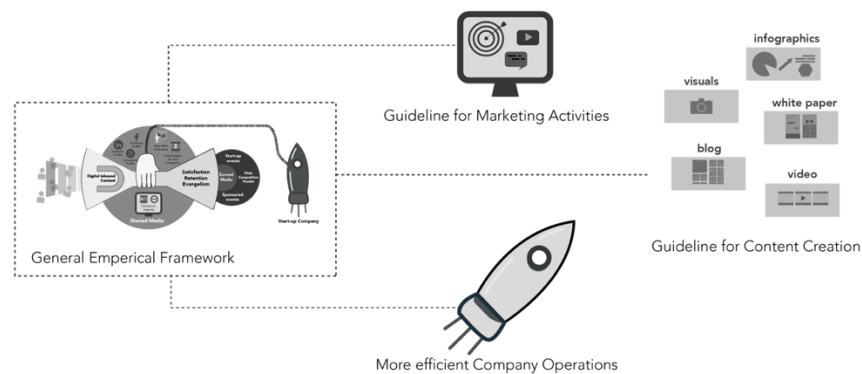


Figure 68. Empirical Framework as a Guideline.

To conclude, the theoretical framework has positively affected the case company. First, the framework itself works as a guideline and foundation for the future marketing operations. Second, the marketing concepts discussed in this thesis made a positive impact in

constructing and communicating the value provided by the case company's main product and the picture of the company itself. Nevertheless, there are certain limitations regarding the empirical part and the case which will be discussed in the next section.

7.4 Limitations and insights for further development

Previous section discussed the results of the case and the impact of insights from the theoretical framework on the case company. Overall, the case has shown positive outcomes, though there are certain limitations to be addressed. The following section will briefly discuss these limitations and propose the suggestions for further development. In general, the limitations can be divided in two groups shown in Figure 69.

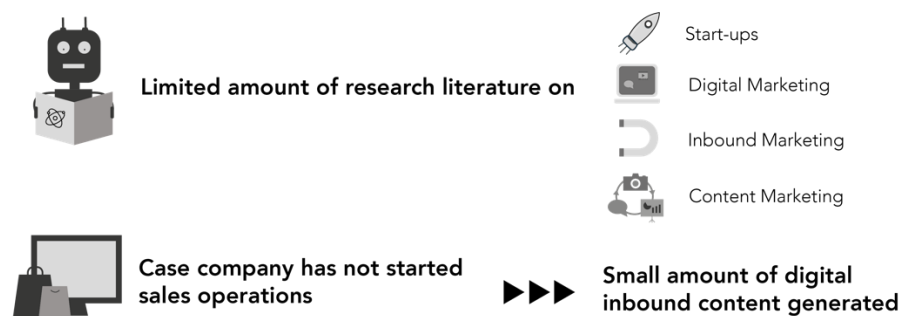


Figure 69. Limitations of the Main Theoretical Framework and the Case.

First, in the theoretical chapters it was mentioned several times that the amount of research literature related to digital, inbound, content marketing, and start-ups is scarce. In addition, as discussed, B2B industry has not been impacted by digitalization such intensively as a consumer sector (Kuchler and Cederlöf, 2016; McKinsey & Company, 2017). Several institutions (for example, Content Marketing Institute), and companies developing CRM software (for example, HubSpot, Salesforce) bring out statistical data that companies use digital, inbound and content marketing more and more. Nevertheless, there is no theoretical framework on either of these marketing types.

Second, Figure 69 pointed out the limitation related to the case itself. Main limitation is concerned with the fact that the case company has not started its sales operations yet is still developing its software product. Due to these concerns, it is not possible to fully construct the value proposition of the case company's software product and create much content related to it. Consequently, the lack of the content developed does not allow to evaluate the full performance of the framework. For these reasons, at the current stage, the proposed framework can be viable as a tool for creating and organizing the content developed by a start-up company. More detailed analysis can be done at the stages when the case company will start its sales operations.

Apart from the limitations, this section briefly discusses insights related to possible development or changes to empirical part of this thesis. These insights based on the development of the case company and close collaboration between the author and the case company's management. In more detail, based on the results achieved throughout the case, it is possible to address the following possible directions:

- Focus on marketing before a company starts its sales
- Focus on brand management as one of the main pieces of theoretical framework
- Focus on constructing value proposition specifically for a start-up company

First, it was pointed out that the case company has not started its sales, which is a common situation for a start-up. However, marketing operations can still be very important, due to the fact that a start-up company has to develop its network in the industry and brand image which is important for investors and HR-related activities. Second, based on the results, significant impact from the main framework came to the case company's brand development and it is possible to focus more specifically on the subject of brand management.

Finally, the research could be fully dedicated to the process of constructing the value proposition for a start-up company, as this activity could be considered as one of the most problematic within the start-up culture. For example, as also described in this case, start-ups might not have enough data regarding their offering, which does not allow them to construct the value proposition at its full potential. Nevertheless, they still have to showcase the value to investors and potential piloting customers.

8. CONCLUSION

Digitalization has created new environments for the relationships between companies and their customers which are Internet and social media. These environments have also become the initial sources of information for the customers before the purchase. In this new reality companies have to use new methods for sales and marketing, as traditional outbound marketing technics such as cold calls, print advertisement, and TV-commercials are becoming less and less effective. Marketing methodologies that are becoming more and more popular with the rise of Internet and social media are digital, inbound, and content marketing. These methodologies are more customer-oriented and also cost effective in terms of their distribution channels. Furthermore, one of the main objectives in marketing is the communication of customer value. For companies such as start-ups the communication of the value provided by their offerings with traditional marketing technics is a complicated task, due to start-ups characteristics of scarce resources and undeveloped industrial networks. Therefore, start-ups, being also the force for innovation in the market, are the ones for whom the application of digital marketing methodologies is beneficial.

This study aimed at exploring how digital marketing methodologies such as inbound and content marketing can be used in a start-up company in order to communicate the value of a start-up's offering. For this reason, this thesis introduced the concept of digital inbound content as a source of value and discussed the application of it in a start-up's owned media. In order to address the objective of this thesis, a theoretical study was conducted and literature on digital marketing, inbound marketing, content marketing, customer value, and start-ups was analyzed. Based on theoretical review a framework was designed. The viability of the framework was tested and analyzed in real case of a software start-up that operates in the field of electronics hardware testing.

The results of the study have shown that digital inbound content can be effectively used as a tool for communicating the value of a start-up's offering in a start-up's owned media. Digital inbound content has also significantly contributed to the development of a start-up's owned media itself. Moreover, the methodologies of inbound and content marketing positively affected the process of constructing the value proposition of a start-up's offering. In addition, digital inbound content benefited start-up company's brand, and inbound and content marketing methodologies positively contributed to the development and standardization of a start-up's content overall. The developed theoretical framework can

be used as a guideline marketing tool for the content creation and development of a start-up company's owned media.

Marketing and content-development projects of the case company have shown that digital inbound content can be used as a marketing tool even before a company has started its sales operations. The case company was able to develop its owned media and establish its brand presence. In addition, with the help of digital and inbound marketing, the case company has developed more effective processes for content creation and standardization. Marketing and content development projects of the case company have also clearly shown the need for an effective content development for a start-up. The reasons are that start-ups have to engage in the local community and develop a lot of investment related content which is needed before a start-up start its sales. Figure 70 shows the framework of digital inbound content as a source of value for a start-up being used as a guideline for the development of owned media and investment-related content before sales.

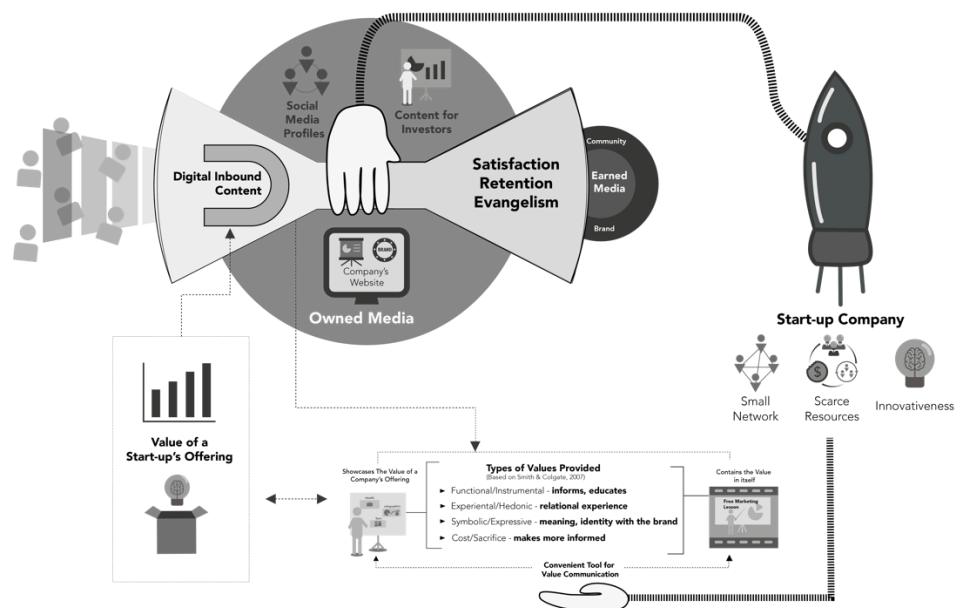


Figure 70. Digital Inbound Content as a Source of Value: Application in a Start-up Before Sales Operations.

Besides positive results, this study has certain limitations. First, the case company has not finished the development of its main product and, for this reason, not a lot of content was created to test the framework. Second, the literature on digital marketing, inbound marketing, content marketing, and start-ups is scarce. Most of the information is available in blogosphere, social media, or provided by commercial institutions. However, the usage of digital marketing methodologies is undoubtedly increasing and, hopefully, more research will be conducted regarding these interesting topics.

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APPENDIX 1

Table 8. *Customer Value Creation Framework (Smith & Colgate, 2007)*

Sources of Value	Types of Value			
	Functional/ Instrumental	Experiential/ Hedonic	Symbolic/ Expressive	Cost/ Sacrifice
	Correct/accurate attributes; Appropriate performances; Appropriate outcomes	Sensory; Emotional; Social/relational; Epistemic	Self-identity/worth; Personal meaning; self-expression; social meaning; conditional meaning	Economic; Psychological; Personal Investment; Risk
Information	Information informs, educates, and helps customers realize performance and outcomes	Copy and creativity can provide or enhance sensory, emotional, and epistemic experiences	Can position a product, help consumers identify with the product, help them make associations, and interpret meaning	Helps consumers evaluate alternatives; make more informed; faster, and less stressful decisions; helps lower pieces by greater competition
Products	Products directly provide features, functions, and characteristics that allow performances and outcomes	Provide sensory, emotional, relational, and epistemic experiences: augmenting goods or as the focal product	Products enhance consumer self-concepts, provide personal meaning, offer self-expression, and provide social meaning	Product price and augmented product considerations, such as operating costs, assembly, ease of use, warranty, and service terms, help to reduce costs and sacrifices
Interactions (with employee and system)	Sales call frequency and duration, service interactions and responsiveness, and interactions with systems provide or enhance desired performances and outcomes	Service attributes, such as staff politeness, friendliness, or empathy, create sensory, emotional, relational, and epistemic experiences for customers, as do service recovery, customer support, and other systems	Staff and system interactions can make customers feel better about themselves and provide personal meaning to customers; privileged interactions support status and prestige. Equity policies can enhance sociocultural meaning	Interactions with people and systems add to or reduce the economic and psychological cost of a product and increase or reduce the personal investment required to acquire and consume the product
Environment (purchase and consumption)	Furniture, fixture, lighting, layout, and other decorative features and attributes of the purchasing or consumption environment contribute to functional/instrumental value by enhancing or detracting from product performances and outcomes	Feature and attributes of the purchasing or consumption environment such as music, ambience, and atmosphere can create sensory, emotional, and epistemic experiences for customers.	Where a product is purchased or consumed can provide personal, social, or sociocultural meaning and can enhance self-worth and expression – a cup of coffee at an outdoor café may have more symbolic value than coffee at home	Contributes to the economic cost of a product, psychological cost, personal investment, and risk
Ownership/ Possession transfer	Correct, accurate, and timely fulfillment processes, provide functional/instrumental value	Fulfilling delivery promises and how a product is delivered can enhance the customer experience – as can pride of ownership and product potency	How a product is delivered and by whom, can create a symbolic	Can be enhanced with payment terms, delivery options, return policies, billing accuracy, order tracking systems, access to supplier personnel, and dispute resolution procedures

APPENDIX 2

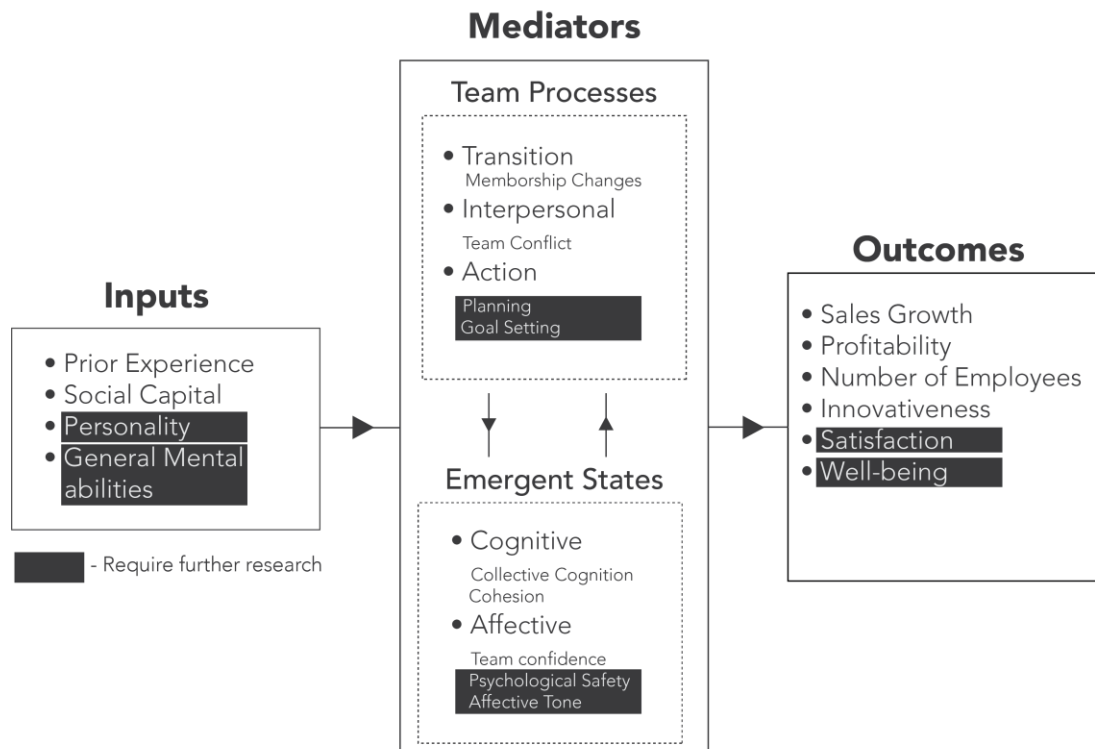


Figure 71. New Venture Team Input-Mediators-Outcome Framework Full Version (Klotz et al., 2014).